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Val Leu Cys Ser Thr Asn Val Ser His Tyr Glu Leu Gln Val Glu Ile

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Gly Arg Gly Phe Asp Asn Leu Thr Ser Val His Leu Ala Arg His Thr

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Gln Asn Gly Cys Ile His Arg Ser Ile Lys Ala Ser His Ile Leu Ile  
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Ser Gly Asp Gly Leu Val Thr Leu Ser Gly Leu Ser His Leu His Ser  
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Leu Val Lys His Gly Gln Arg His Arg Ala Val Tyr Asp Phe Pro Gln  
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Gly Thr His Thr Val Asn Ser Asp Arg Leu His Thr Pro Ser Ser Lys

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Thr Phe Ser Pro Ala Phe Phe Ser Leu Val Gln Leu Cys Leu Gln Gln

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Asn Tyr Tyr Ser Ser Arg Phe Ser Pro Asp Ser Gln Tyr Ile Asp Asn  
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Arg Ser Val Asn Ser Ala Gly Leu His Thr Val Gln Arg Ala Pro Arg  
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Leu Asn His Pro Pro Glu Gln Ile Asp Ser His Ser Arg Leu Pro His  
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Val Gly Lys Ser Gln Glu Glu Val Val Ser Leu Leu Arg Ser Thr Lys

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Pro Pro Gly Pro Glu Leu Pro Ile Glu Thr Ala Leu Asp Asp Arg Glu  
 565 570 575

Arg Arg Ile Ser His Ser Leu Tyr Ser Gly Ile Glu Gly Leu Asp Glu  
 580 585 590

Ser Pro Ser Arg Asn Ala Ala Leu Ser Arg Ile Met Gly Lys Tyr Gln  
 595 600 605

20060005 012900



Leu Ser Pro Thr Val Asn Met Pro Gln Asp Asp Thr Val Ile Ile Glu  
610 615 620

Asp Asp Arg Leu Pro Val Leu Pro Pro His Leu Ser Asp Gln Ser Ser  
625 630 635 640

Ser Ser Ser His Asp Asp Val Gly Phe Val Thr Ala Asp Ala Gly Thr  
645 650 655

Trp Ala Lys Ala Ala Ile Ser Asp Ser Ala Asp Cys Ser Leu Ser Pro  
660 665 670

Asp Val Asp Pro Val Leu Ala Phe Gln Arg Glu Gly Phe Gly Arg Gln  
675 680 685

Thr Asp Glu Thr Lys Leu Asn Thr Val Asp Asp Gln Lys Ala Gly Ser  
690 695 700

Pro Ser Arg Asp Val Gly Pro Ser Leu Gly Leu Lys Lys Ser Ser Ser  
705 710 715 720

Leu Glu Ser Leu Gln Thr Ala Val Ala Glu Val Thr Leu Asn Gly Asp  
725 730 735

Ile Pro Phe His Arg Pro Arg Pro Arg Ile Ile Arg Gly Arg Gly Cys

20250509 10060065 012903

740

745

750

Asn Glu Ser Phe Arg Ala Ala Ile Asp Lys Ser Tyr Asp Lys Pro Ala

755

760

765

Val Asp Asp Asp Asp Glu Gly Met Glu Thr Leu Glu Glu Asp Thr Glu

770

775

780

Glu Ser Ser Arg Ser Gly Arg Glu Ser Val Ser Thr Ala Ser Asp Gln

785

790

795

800

Pro Ser His Ser Leu Glu Arg Gln Met Asn Gly Asn Gln Glu Lys Gly

805

810

815

Asp Lys Thr Asp Arg Lys Lys Asp Lys Thr Gly Lys Glu Lys Lys Lys

820

825

830

Asp Arg Asp Lys Glu Lys Asp Lys Met Lys Ala Lys Lys Gly Met Leu

835

840

845

Lys Gly Leu Gly Asp Met Phe Ser Leu Ala Lys Leu Lys Pro Glu Lys

850

855

860

Arg

865

2025-01-20 10:00:00

<210> 5

<211> 30

<212> RNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
Synthesized Sequence

<400> 5

agcaucgagu cggccuuguu ggccuacugg

30

<210> 6

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially  
Synthesized Primer Sequence

<400> 6

gcggetgaag acggcctatg tggccttttt tttttttttt tt

42

20250519 10:59:00

<211> 21

<213> Artificial Sequence

<223> Description of Artificial Sequence:Artificially  
Synthesized Primer Sequence

agcatcgagt cggccttgtt g

21

<211> 21

<213> Artificial Sequence

<223> Description of Artificial Sequence:Artificially  
Synthesized Primer Sequence

g c g g c t g a a g   a c g g c c t a t g   t

21

&lt;210&gt; 9

&lt;211&gt; 433

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 9

Met Glu Val Val Asp Pro Gln Gln Leu Gly Met Phe Thr Glu Gly Glu  
 1 5 10 15

Leu Met Ser Val Gly Met Asp Thr Phe Ile His Arg Ile Asp Ser Thr  
 20 25 30

Glu Val Ile Tyr Gln Pro Arg Arg Lys Arg Ala Lys Leu Ile Gly Lys  
 35 40 45

Tyr Leu Met Gly Asp Leu Leu Gly Glu Gly Ser Tyr Gly Lys Val Lys  
 50 55 60

Glu Val Leu Asp Ser Glu Thr Leu Cys Arg Arg Ala Val Lys Ile Leu  
 65 70 75 80

Lys Lys Lys Lys Leu Arg Arg Ile Pro Asn Gly Glu Ala Asn Val Lys  
 85 90 95

Lys Glu Ile Gln Leu Leu Arg Arg Leu Arg His Lys Asn Val Ile Gln

20250610 09:00:00

240

Ala Gly Val Thr Leu Tyr Asn Ile Thr Thr Gly Leu Tyr Pro Phe Glu  
 245 250 255

Gly Asp Asn Ile Tyr Lys Leu Phe Glu Asn Ile Gly Lys Gly Ser Tyr  
 260 265 270

Ala Ile Pro Gly Asp Cys Gly Pro Pro Leu Ser Asp Leu Leu Lys Gly  
 275 280 285

Met Leu Glu Tyr Glu Pro Ala Lys Arg Phe Ser Ile Arg Gln Ile Arg  
 290 295 300

Gln His Ser Trp Phe Arg Lys Lys His Pro Pro Ala Glu Ala Pro Val  
 305 310 315 320

Pro Ile Pro Pro Ser Pro Asp Thr Lys Asp Arg Trp Arg Ser Met Thr  
 325 330 335

Val Val Pro Tyr Leu Glu Asp Leu His Gly Ala Asp Glu Asp Glu Asp  
 340 345 350

Leu Phe Asp Ile Glu Asp Asp Ile Ile Tyr Thr Gln Asp Phe Thr Val  
 355 360 365

Pro Gly Gln Val Pro Glu Glu Glu Ala Ser His Asn Gly Gln Arg Arg  
 370 375 380

Arg His Leu Ala Glu Gln Phe Ala Val Gly Glu Ile Ile Thr Asp Met  
20 25 30



Ile Leu Asp Ile Leu Glu Tyr Ile His Glu His Glu Tyr Val His Gly  
165 170 175

Asp Ile Lys Ala Ser Asn Leu Leu Leu Asn Tyr Lys Asn Pro Asp Gln  
 180 185 190

Val Tyr Leu Val Asp Tyr Gly Leu Ala Tyr Arg Tyr Cys Pro Glu Gly  
 195 200 205

Val His Lys Glu Tyr Lys Glu Asp Pro Lys Arg Cys His Asp Gly Thr  
 210 215 220

Ile Glu Phe Thr Ser Ile Asp Ala His Asn Gly Val Ala Pro Ser Arg  
 225 230 235 240

Arg Gly Asp Leu Glu Ile Leu Gly Tyr Cys Met Ile Gln Trp Leu Thr  
 245 250 255

Gly His Leu Pro Trp Glu Asp Asn Leu Lys Asp Pro Lys Tyr Val Arg  
 260 265 270

Asp Ser Lys Ile Arg Tyr Arg Glu Asn Ile Ala Ser Leu Met Asp Lys  
 275 280 285

Cys Phe Pro Glu Lys Asn Lys Pro Gly Glu Ile Ala Lys Tyr Met Glu  
 290 295 300

Thr Val Lys Leu Leu Asp Tyr Thr Glu Lys Pro Leu Tyr Glu Asn Leu

206270" 59005007

305                      310                      315                      320

Arg Asp Ile Leu Leu Gln Gly Leu Lys Ala Ile Gly Ser Lys Asp Asp  
                                  325                      330                      335

Gly Lys Leu Asp Leu Ser Val Val Glu Asn Gly Gly Leu Lys Ala Lys  
                                  340                      345                      350

Thr Ile Thr Lys Lys Arg Lys Lys Glu Ile Glu Glu Ser Lys Glu Pro  
                                  355                      360                      365

Gly Val Glu Asp Thr Glu Trp Ser Asn Thr Gln Thr Glu Glu Ala Ile  
                                  370                      375                      380

Gln Thr Arg Ser Arg Thr Arg Lys Arg Val Gln Lys  
 385                      390                      395

<210> 11

<211> 297

<212> PRT

<213> Homo sapiens

<400> 11

Met Glu Asp Tyr Thr Lys Ile Glu Lys Ile Gly Glu Gly Thr Tyr Gly  
                                  1                      5                      10                      15

Val Val Tyr Lys Gly Arg His Lys Thr Thr Gly Gln Val Val Ala Met

20

25

30

Lys Lys Ile Arg Leu Glu Ser Glu Glu Glu Gly Val Pro Ser Thr Ala

35

40

45

Ile Arg Glu Ile Ser Leu Leu Lys Glu Leu Arg His Pro Asn Ile Val

50

55

60

Ser Leu Gln Asp Val Leu Met Gln Asp Ser Arg Leu Tyr Leu Ile Phe

65

70

75

80

Glu Phe Leu Ser Met Asp Leu Lys Lys Tyr Leu Asp Ser Ile Pro Pro

85

90

95

Gly Gln Tyr Met Asp Ser Ser Leu Val Lys Ser Tyr Leu Tyr Gln Ile

100

105

110

Leu Gln Gly Ile Val Phe Cys His Ser Arg Arg Val Leu His Arg Asp

115

120

125

Leu Lys Pro Gln Asn Leu Leu Ile Asp Asp Lys Gly Thr Ile Lys Leu

130

135

140

Ala Asp Phe Gly Leu Ala Arg Ala Phe Gly Ile Pro Ile Arg Val Tyr

205270" 59099001

145	150	155	160
Thr His Glu Val Val Thr Leu Trp Tyr Arg Ser Pro Glu Val Leu Leu			
	165	170	175
Gly Ser Ala Arg Tyr Ser Thr Pro Val Asp Ile Trp Ser Ile Gly Thr			
	180	185	190
Ile Phe Ala Glu Leu Ala Thr Lys Lys Pro Leu Phe His Gly Asp Ser			
	195	200	205
Glu Ile Asp Gln Leu Phe Arg Ile Phe Arg Ala Leu Gly Thr Pro Asn			
	210	215	220
Asn Glu Val Trp Pro Glu Val Glu Ser Leu Gln Asp Tyr Lys Asn Thr			
225	230	235	240
Phe Pro Lys Trp Lys Pro Gly Ser Leu Ala Ser His Val Lys Asn Leu			
	245	250	255
Asp Glu Asn Gly Leu Asp Leu Leu Ser Lys Met Leu Ile Tyr Asp Pro			
	260	265	270
Ala Lys Arg Ile Ser Gly Lys Met Ala Leu Asn His Pro Tyr Phe Asn			
	275	280	285

2025-01-29 10:50:55

Asp Leu Asp Asn Gln Ile Lys Lys Met

290

295

<210> 12

<211> 403

<212> PRT

<213> Homo sapiens

<400> 12

Met Asp Arg Ser Lys Glu Asn Cys Ile Ser Gly Pro Val Lys Ala Thr

1

5

10

15

Ala Pro Val Gly Gly Pro Lys Arg Val Leu Val Thr Gln Gln Phe Pro

20

25

30

Cys Gln Asn Pro Leu Pro Val Asn Ser Gly Gln Ala Gln Arg Val Leu

35

40

45

Cys Pro Ser Asn Ser Ser Gln Arg Ile Pro Leu Gln Ala Gln Lys Leu

50

55

60

Val Ser Ser His Lys Pro Val Gln Asn Gln Lys Gln Lys Gln Leu Gln

65

70

75

80

Ala Thr Ser Val Pro His Pro Val Ser Arg Pro Leu Asn Asn Thr Gln

85

90

95

Lys Ser Lys Gln Pro Leu Pro Ser Ala Pro Glu Asn Asn Pro Glu Glu

100

105

110

Glu Leu Ala Ser Lys Gln Lys Asn Glu Glu Ser Lys Lys Arg Gln Trp

115

120

125

Ala Leu Glu Asp Phe Glu Ile Gly Arg Pro Leu Gly Lys Gly Lys Phe

130

135

140

Gly Asn Val Tyr Leu Ala Arg Glu Lys Gln Ser Lys Phe Ile Leu Ala

145

150

155

160

Leu Lys Val Leu Phe Lys Ala Gln Leu Glu Lys Ala Gly Val Glu His

165

170

175

Gln Leu Arg Arg Glu Val Glu Ile Gln Ser His Leu Arg His Pro Asn

180

185

190

Ile Leu Arg Leu Tyr Gly Tyr Phe His Asp Ala Thr Arg Val Tyr Leu

195

200

205

Ile Leu Glu Tyr Ala Pro Leu Gly Thr Val Tyr Arg Glu Leu Gln Lys

210

215

220

202505.0120

Thr Glu Gly Ala Arg Asp Leu Ile Ser Arg Leu Leu Lys His Asn Pro  
355 360 365



Ser Gln Arg Pro Met Leu Arg Glu Val Leu Glu His Pro Trp Ile Thr  
 370 375 380

Ala Asn Ser Ser Lys Pro Ser Asn Cys Gln Asn Lys Glu Ser Ala Ser  
 385 390 395 400

Lys Gln Ser

<210> 13

<211> 344

<212> PRT

<213> Homo sapiens

<400> 13

Met Ala Gln Lys Glu Asn Ser Tyr Pro Trp Pro Tyr Gly Arg Gln Thr  
 1 5 10 15

Ala Pro Ser Gly Leu Ser Thr Leu Pro Gln Arg Val Leu Arg Lys Glu  
 20 25 30

Pro Val Thr Pro Ser Ala Leu Val Leu Met Ser Arg Ser Asn Val Gln  
 35 40 45

10060065.012902

Pro Thr Ala Ala Pro Gly Gln Lys Val Met Glu Asn Ser Ser Gly Thr  
 50 55 60

Pro Asp Ile Leu Thr Arg His Phe Thr Ile Asp Asp Phe Glu Ile Gly  
 65 70 75 80

Arg Pro Leu Gly Lys Gly Lys Phe Gly Asn Val Tyr Leu Ala Arg Glu  
 85 90 95

Lys Lys Ser His Phe Ile Val Ala Leu Lys Val Leu Phe Lys Ser Gln  
 100 105 110

Ile Glu Lys Glu Gly Val Glu His Gln Leu Arg Arg Glu Ile Glu Ile  
 115 120 125

Gln Ala His Leu His His Pro Asn Ile Leu Arg Leu Tyr Asn Tyr Phe  
 130 135 140

Tyr Asp Arg Arg Arg Ile Tyr Leu Ile Leu Glu Tyr Ala Pro Arg Gly  
 145 150 155 160

Glu Leu Tyr Lys Glu Leu Gln Lys Ser Cys Thr Phe Asp Glu Gln Arg  
 165 170 175

Thr Ala Thr Ile Met Glu Glu Leu Ala Asp Ala Leu Met Tyr Cys His  
 180 185 190

206210"590900T

Gly Lys Lys Val Ile His Arg Asp Ile Lys Pro Glu Asn Leu Leu Leu

195

200

205

Gly Leu Lys Gly Glu Leu Lys Ile Ala Asp Phe Gly Trp Ser Val His

210

215

220

Ala Pro Ser Leu Arg Arg Lys Thr Met Cys Gly Thr Leu Asp Tyr Leu

225

230

235

240

Pro Pro Glu Met Ile Glu Gly Arg Met His Asn Glu Lys Val Asp Leu

245

250

255

Trp Cys Ile Gly Val Leu Cys Tyr Glu Leu Leu Val Gly Asn Pro Pro

260

265

270

Phe Glu Ser Ala Ser His Asn Glu Thr Tyr Arg Arg Ile Val Lys Val

275

280

285

Asp Leu Lys Phe Pro Ala Ser Val Pro Thr Gly Ala Gln Asp Leu Ile

290

295

300

Ser Lys Leu Leu Arg His Asn Pro Ser Glu Arg Leu Pro Leu Ala Gln

305

310

315

320

Val Ser Ala His Pro Trp Val Arg Ala Asn Ser Arg Arg Val Leu Pro

206270 590900T

325

330

335

Pro Ser Ala Leu Gln Ser Val Ala

340

&lt;210&gt; 14

&lt;211&gt; 745

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 14

Met Glu Arg Pro Pro Gly Leu Arg Pro Gly Ala Gly Gly Pro Trp Glu

1

5

10

15

Met Arg Glu Arg Leu Gly Thr Gly Gly Phe Gly Asn Val Cys Leu Tyr

20

25

30

Gln His Arg Glu Leu Asp Leu Lys Ile Ala Ile Lys Ser Cys Arg Leu

35

40

45

Glu Leu Ser Thr Lys Asn Arg Glu Arg Trp Cys His Glu Ile Gln Ile

50

55

60

Met Lys Lys Leu Asn His Ala Asn Val Val Lys Ala Cys Asp Val Pro

65

70

75

80

206270"590900F

85

95

100

105

110

115

120

125

130

135

140

145

150

155

160

165

170

175

180

185

190

195

200

205

Thr Met Val Phe Glu Cys Ile Ala Gly Tyr Arg Pro Phe Leu His His

210

215

220

Leu Gln Pro Phe Thr Trp His Glu Lys Ile Lys Lys Lys Asp Pro Lys

225

230

235

240

Cys Ile Phe Ala Cys Glu Glu Met Ser Gly Glu Val Arg Phe Ser Ser

245

250

255

His Leu Pro Gln Pro Asn Ser Leu Cys Ser Leu Ile Val Glu Pro Met

260

265

270

Glu Asn Trp Leu Gln Leu Met Leu Asn Trp Asp Pro Gln Gln Arg Gly

275

280

285

Gly Pro Val Asp Leu Thr Leu Lys Gln Pro Arg Cys Phe Val Leu Met

290

295

300

Asp His Ile Leu Asn Leu Lys Ile Val His Ile Leu Asn Met Thr Ser

305

310

315

320

Ala Lys Ile Ile Ser Phe Leu Leu Pro Pro Asp Glu Ser Leu His Ser

325

330

335

Leu Gln Ser Arg Ile Glu Arg Glu Thr Gly Ile Asn Thr Gly Ser Gln

340

345

350

206210"5900000T

Glu Leu Leu Ser Glu Thr Gly Ile Ser Leu Asp Pro Arg Lys Pro Ala  
 355 360 365

Ser Gln Cys Val Leu Asp Gly Val Arg Gly Cys Asp Ser Tyr Met Val  
 370 375 380

Tyr Leu Phe Asp Lys Ser Lys Thr Val Tyr Glu Gly Pro Phe Ala Ser  
 385 390 395 400

Arg Ser Leu Ser Asp Cys Val Asn Tyr Ile Val Gln Asp Ser Lys Ile  
 405 410 415

Gln Leu Pro Ile Ile Gln Leu Arg Lys Val Trp Ala Glu Ala Val His  
 420 425 430

Tyr Val Ser Gly Leu Lys Glu Asp Tyr Ser Arg Leu Phe Gln Gly Gln  
 435 440 445

Arg Ala Ala Met Leu Ser Leu Leu Arg Tyr Asn Ala Asn Leu Thr Lys  
 450 455 460

Met Lys Asn Thr Leu Ile Ser Ala Ser Gln Gln Leu Lys Ala Lys Leu  
 465 470 475 480

Glu Phe Phe His Lys Ser Ile Gln Leu Asp Leu Glu Arg Tyr Ser Glu  
 485 490 495

20250707 09005007

Gln Met Thr Tyr Gly Ile Ser Ser Glu Lys Met Leu Lys Ala Trp Lys  
 500 505 510

Glu Met Glu Glu Lys Ala Ile His Tyr Ala Glu Val Gly Val Ile Gly  
 515 520 525

Tyr Leu Glu Asp Gln Ile Met Ser Leu His Ala Glu Ile Met Glu Leu  
 530 535 540

Gln Lys Ser Pro Tyr Gly Arg Arg Gln Gly Asp Leu Met Glu Ser Leu  
 545 550 555 560

Glu Gln Arg Ala Ile Asp Leu Tyr Lys Gln Leu Lys His Arg Pro Ser  
 565 570 575

Asp His Ser Tyr Ser Asp Ser Thr Glu Met Val Lys Ile Ile Val His  
 580 585 590

Thr Val Gln Ser Gln Asp Arg Val Leu Lys Glu Leu Phe Gly His Leu  
 595 600 605

Ser Lys Leu Leu Gly Cys Lys Gln Lys Ile Ile Asp Leu Leu Pro Lys  
 610 615 620

Val Glu Val Ala Leu Ser Asn Ile Lys Glu Ala Asp Asn Thr Val Met

2025-01-20 10:00:00



625                      630                      635                      640

Phe Met Gln Gly Lys Arg Gln Lys Glu Ile Trp His Leu Leu Lys Ile

645                      650                      655

Ala Cys Thr Gln Ser Ser Ala Arg Ser Leu Val Gly Ser Ser Leu Glu

660                      665                      670

Gly Ala Val Thr Pro Gln Thr Ser Ala Trp Leu Pro Pro Thr Ser Ala

675                      680                      685

Glu His Asp His Ser Leu Ser Cys Val Val Thr Pro Gln Asp Gly Glu

690                      695                      700

Thr Ser Ala Gln Met Ile Glu Glu Asn Leu Asn Cys Leu Gly His Leu

705                      710                      715                      720

Ser Thr Ile Ile His Glu Ala Asn Glu Glu Gln Gly Asn Ser Met Met

725                      730                      735

Asn Leu Asp Trp Ser Trp Leu Thr Glu

740                      745

<210> 15

<211> 318

20250509 10:00:00

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 15

Met Ser Lys Pro Pro Ala Pro Asn Pro Thr Pro Pro Arg Asn Leu Asp

1 5 10 15

Ser Arg Thr Phe Ile Thr Ile Gly Asp Arg Asn Phe Glu Val Glu Ala

20 25 30

Asp Asp Leu Val Thr Ile Ser Glu Leu Gly Arg Gly Ala Tyr Gly Val

35 40 45

Val Glu Lys Val Arg His Ala Gln Ser Gly Thr Ile Met Ala Val Lys

50 55 60

Arg Ile Arg Ala Thr Val Asn Ser Gln Glu Gln Lys Arg Leu Leu Met

65 70 75 80

Asp Leu Asp Ile Asn Met Arg Thr Val Asp Cys Phe Tyr Thr Val Thr

85 90 95

Phe Tyr Gly Ala Leu Phe Arg Glu Gly Asp Val Trp Ile Cys Met Glu

100 105 110

Leu Met Asp Thr Ser Leu Asp Lys Phe Tyr Arg Lys Val Leu Asp Lys

205210"990900F

115

120

125

Asn Met Thr Ile Pro Glu Asp Ile Leu Gly Glu Ile Ala Val Ser Ile

130

135

140

Val Arg Ala Leu Glu His Leu His Ser Lys Leu Ser Val Ile His Arg

145

150

155

160

Asp Val Lys Pro Ser Asn Val Leu Ile Asn Lys Glu Gly His Val Lys

165

170

175

Met Cys Asp Phe Gly Ile Ser Gly Tyr Leu Val Asp Ser Val Ala Lys

180

185

190

Thr Met Asp Ala Gly Cys Lys Pro Tyr Met Ala Pro Glu Arg Ile Asn

195

200

205

Pro Glu Leu Asn Gln Lys Gly Tyr Asn Val Lys Ser Asp Val Trp Ser

210

215

220

Leu Gly Ile Thr Met Ile Glu Met Ala Ile Leu Arg Phe Pro Tyr Glu

225

230

235

240

Ser Trp Gly Thr Pro Phe Gln Gln Leu Lys Gln Val Val Glu Glu Pro

245

250

255

20251015005001

Ser Pro Gln Leu Pro Ala Asp Arg Phe Ser Pro Glu Phe Val Asp Phe  
 260 265 270

Thr Ala Gln Cys Leu Arg Lys Asn Pro Ala Glu Arg Met Ser Tyr Leu  
 275 280 285

Glu Leu Met Glu His Pro Phe Phe Thr Leu His Lys Thr Lys Lys Thr  
 290 295 300

Asp Ile Ala Ala Phe Val Lys Lys Ile Leu Gly Glu Asp Ser  
 305 310 315

<210> 16

<211> 379

<212> PRT

<213> Homo sapiens

<400> 16

Met Ala Ala Ala Ala Ala Gln Gly Gly Gly Gly Glu Pro Arg Arg  
 1 5 10 15

Thr Glu Gly Val Gly Pro Gly Val Pro Gly Glu Val Glu Met Val Lys  
 20 25 30

Gly Gln Pro Phe Asp Val Gly Pro Arg Tyr Thr Gln Leu Gln Tyr Ile

2025-10-10 10:00:00

35

40

45

Gly Glu Gly Ala Tyr Gly Met Val Ser Ser Ala Tyr Asp His Val Arg

50

55

60

Lys Thr Arg Val Ala Ile Lys Lys Ile Ser Pro Phe Glu His Gln Thr

65

70

75

80

Tyr Cys Gln Arg Thr Leu Arg Glu Ile Gln Ile Leu Leu Arg Phe Arg

85

90

95

His Glu Asn Val Ile Gly Ile Arg Asp Ile Leu Arg Ala Ser Thr Leu

100

105

110

Glu Ala Met Arg Asp Val Tyr Ile Val Gln Asp Leu Met Glu Thr Asp

115

120

125

Leu Tyr Lys Leu Leu Lys Ser Gln Gln Leu Ser Asn Asp His Ile Cys

130

135

140

Tyr Phe Leu Tyr Gln Ile Leu Arg Gly Leu Lys Tyr Ile His Ser Ala

145

150

155

160

Asn Val Leu His Arg Asp Leu Lys Pro Ser Asn Leu Leu Ser Asn Thr

165

170

175

20250505 12:20

Thr Cys Asp Leu Lys Ile Cys Asp Phe Gly Leu Ala Arg Ile Ala Asp  
 180 185 190

Pro Glu His Asp His Thr Gly Phe Leu Thr Glu Tyr Val Ala Thr Arg  
 195 200 205

Trp Tyr Arg Ala Pro Glu Ile Met Leu Asn Ser Lys Gly Tyr Thr Lys  
 210 215 220

Ser Ile Asp Ile Trp Ser Val Gly Cys Ile Leu Ala Glu Met Leu Ser  
 225 230 235 240

Asn Arg Pro Ile Phe Pro Gly Lys His Tyr Leu Asp Gln Leu Asn His  
 245 250 255

Ile Leu Gly Ile Leu Gly Ser Pro Ser Gln Glu Asp Leu Asn Cys Ile  
 260 265 270

Ile Asn Met Lys Ala Arg Asn Tyr Leu Gln Ser Leu Pro Ser Lys Thr  
 275 280 285

Lys Val Ala Trp Ala Lys Leu Phe Pro Lys Ser Asp Ser Lys Ala Leu  
 290 295 300

Asp Leu Leu Asp Arg Met Leu Thr Phe Asn Pro Asn Lys Arg Ile Thr  
 305 310 315 320

Val Glu Glu Ala Leu Ala His Pro Tyr Leu Glu Gln Tyr Tyr Asp Pro

325

330

335

Thr Asp Glu Pro Val Ala Glu Glu Pro Phe Thr Phe Ala Met Glu Leu

340

345

350

Asp Asp Leu Pro Lys Glu Arg Leu Lys Glu Leu Ile Phe Gln Glu Thr

355

360

365

Ala Arg Phe Gln Pro Gly Val Leu Glu Ala Pro

370

375

&lt;210&gt; 17

&lt;211&gt; 648

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 17

Met Glu His Ile Gln Gly Ala Trp Lys Thr Ile Ser Asn Gly Phe Gly

1

5

10

15

Phe Lys Asp Ala Val Phe Asp Gly Ser Ser Cys Ile Ser Pro Thr Ile

20

25

30

2025.01.29 10:59:50

Val Gln Gln Phe Gly Tyr Gln Arg Arg Ala Ser Asp Asp Gly Lys Leu  
 35 40 45

Thr Asp Pro Ser Lys Thr Ser Asn Thr Ile Arg Val Phe Leu Pro Asn  
 50 55 60

Lys Gln Arg Thr Val Val Asn Val Arg Asn Gly Met Ser Leu His Asp  
 65 70 75 80

Cys Leu Met Lys Ala Leu Lys Val Arg Gly Leu Gln Pro Glu Cys Cys  
 85 90 95

Ala Val Phe Arg Leu Leu His Glu His Lys Gly Lys Lys Ala Arg Leu  
 100 105 110

Asp Trp Asn Thr Asp Ala Ala Ser Leu Ile Gly Glu Glu Leu Gln Val  
 115 120 125

Asp Phe Leu Asp His Val Pro Leu Thr Thr His Asn Phe Ala Arg Lys  
 130 135 140

Thr Phe Leu Lys Leu Ala Phe Cys Asp Ile Cys Gln Lys Phe Leu Leu  
 145 150 155 160

Asn Gly Phe Arg Cys Gln Thr Cys Gly Tyr Lys Phe His Glu His Cys  
 165 170 175

1006065.04900



Ser Thr Lys Val Pro Thr Met Cys Val Asp Trp Ser Asn Ile Arg Gln  
 180 185 190

Leu Leu Leu Phe Pro Asn Ser Thr Ile Gly Asp Ser Gly Val Pro Ala  
 195 200 205

Leu Pro Ser Leu Thr Met Arg Arg Met Arg Glu Ser Val Ser Arg Met  
 210 215 220

Pro Val Ser Ser Gln His Arg Tyr Ser Thr Pro His Ala Phe Thr Phe  
 225 230 235 240

Asn Thr Ser Ser Pro Ser Ser Glu Gly Ser Leu Ser Gln Arg Gln Arg  
 245 250 255

Ser Thr Ser Thr Pro Asn Val His Met Val Ser Thr Thr Leu Pro Val  
 260 265 270

Asp Ser Arg Met Ile Glu Asp Ala Ile Arg Ser His Ser Glu Ser Ala  
 275 280 285

Ser Pro Ser Ala Leu Ser Ser Ser Pro Asn Asn Leu Ser Pro Thr Gly  
 290 295 300

Trp Ser Gln Pro Lys Thr Pro Val Pro Ala Gln Arg Glu Arg Ala Pro

20250703 10:00:00

305                      310                      315                      320  
 Val Ser Gly Thr Gln Glu Lys Asn Lys Ile Arg Pro Arg Gly Gln Arg  
                                  325                      330                      335  
 Asp Ser Ser Tyr Tyr Trp Glu Ile Glu Ala Ser Glu Val Met Leu Ser  
                                  340                      345                      350  
 Thr Arg Ile Gly Ser Gly Ser Phe Gly Thr Val Tyr Lys Gly Lys Trp  
                                  355                      360                      365  
 His Gly Asp Val Ala Val Lys Ile Leu Lys Val Val Asp Pro Thr Pro  
                                  370                      375                      380  
 Glu Gln Phe Gln Ala Phe Arg Asn Glu Val Ala Val Leu Arg Lys Thr  
 385                      390                      395                      400  
 Arg His Val Asn Ile Leu Leu Phe Met Gly Tyr Met Thr Lys Asp Asn  
                                  405                      410                      415  
 Leu Ala Ile Val Thr Gln Trp Cys Glu Gly Ser Ser Leu Tyr Lys His  
                                  420                      425                      430  
 Leu His Val Gln Glu Thr Lys Phe Gln Met Phe Gln Leu Ile Asp Ile  
                                  435                      440                      445

206210 590000F  
 1000000 04000

Ala Arg Gln Thr Ala Gln Gly Met Asp Tyr Leu His Ala Lys Asn Ile  
 450 455 460

Ile His Arg Asp Met Lys Ser Asn Asn Ile Phe Leu His Glu Gly Leu  
 465 470 475 480

Thr Val Lys Ile Gly Asp Phe Gly Leu Ala Thr Val Lys Ser Arg Trp  
 485 490 495

Ser Gly Ser Gln Gln Val Glu Gln Pro Thr Gly Ser Val Leu Trp Met  
 500 505 510

Ala Pro Glu Val Ile Arg Met Gln Asp Asn Asn Pro Phe Ser Phe Gln  
 515 520 525

Ser Asp Val Tyr Ser Tyr Gly Ile Val Leu Tyr Glu Leu Met Thr Gly  
 530 535 540

Glu Leu Pro Tyr Ser His Ile Asn Asn Arg Asp Gln Ile Ile Phe Met  
 545 550 555 560

Val Gly Arg Gly Tyr Ala Ser Pro Asp Leu Ser Lys Leu Tyr Lys Asn  
 565 570 575

Cys Pro Lys Ala Met Lys Arg Leu Val Ala Asp Cys Val Lys Lys Val  
 580 585 590

2025.04.29 10:59:00

Lys Glu Glu Arg Pro Leu Phe Pro Gln Ile Leu Ser Ser Ile Glu Leu  
 595 600 605

Leu Gln His Ser Leu Pro Lys Ile Asn Arg Ser Ala Ser Glu Pro Ser  
 610 615 620

Leu His Arg Ala Ala His Thr Glu Asp Ile Asn Ala Cys Thr Leu Thr  
 625 630 635 640

Thr Ser Pro Arg Leu Pro Val Phe  
 645

<210> 18

<211> 480

<212> PRT

<213> Homo sapiens

<400> 18

Met Ser Asp Val Ala Ile Val Lys Glu Gly Trp Leu His Lys Arg Gly  
 1 5 10 15

Glu Tyr Ile Lys Thr Trp Arg Pro Arg Tyr Phe Leu Leu Lys Asn Asp  
 20 25 30

006210" 5909900T

Gly Thr Phe Ile Gly Tyr Lys Glu Arg Pro Gln Asp Val Asp Gln Arg

35

40

45

Glu Ala Pro Leu Asn Asn Phe Ser Val Ala Gln Cys Gln Leu Met Lys

50

55

60

Thr Glu Arg Pro Arg Pro Asn Thr Phe Ile Ile Arg Cys Leu Gln Trp

65

70

75

80

Thr Thr Val Ile Glu Arg Thr Phe His Val Glu Thr Pro Glu Glu Arg

85

90

95

Glu Glu Trp Thr Thr Ala Ile Gln Thr Val Ala Asp Gly Leu Lys Lys

100

105

110

Gln Glu Glu Glu Glu Met Asp Phe Arg Ser Gly Ser Pro Ser Asp Asn

115

120

125

Ser Gly Ala Glu Glu Met Glu Val Ser Leu Ala Lys Pro Lys His Arg

130

135

140

Val Thr Met Asn Glu Phe Glu Tyr Leu Lys Leu Leu Gly Lys Gly Thr

145

150

155

160

Phe Gly Lys Val Ile Leu Val Lys Glu Lys Ala Thr Gly Arg Tyr Tyr

165

170

175

206270" 59009007

Ala Met Lys Ile Leu Lys Lys Glu Val Ile Val Ala Lys Asp Glu Val

180

185

190

Ala His Thr Leu Thr Glu Asn Arg Val Leu Gln Asn Ser Arg His Pro

195

200

205

Phe Leu Thr Ala Leu Lys Tyr Ser Phe Gln Thr His Asp Arg Leu Cys

210

215

220

Phe Val Met Glu Tyr Ala Asn Gly Gly Glu Leu Phe Phe His Leu Ser

225

230

235

240

Arg Glu Arg Val Phe Ser Glu Asp Arg Ala Arg Phe Tyr Gly Ala Glu

245

250

255

Ile Val Ser Ala Leu Asp Tyr Leu His Ser Glu Lys Asn Val Val Tyr

260

265

270

Arg Asp Leu Lys Leu Glu Asn Leu Met Leu Asp Lys Asp Gly His Ile

275

280

285

Lys Ile Thr Asp Phe Gly Leu Cys Lys Glu Gly Ile Lys Asp Gly Ala

290

295

300

Thr Met Lys Thr Phe Cys Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val

206210"5009001

305						310						315					320
Leu	Glu	Asp	Asn	Asp	Tyr	Gly	Arg	Ala	Val	Asp	Trp	Trp	Gly	Leu	Gly		
				325					330						335		
Val	Val	Met	Tyr	Glu	Met	Met	Cys	Gly	Arg	Leu	Pro	Phe	Tyr	Asn	Gln		
			340					345						350			
Asp	His	Glu	Lys	Leu	Phe	Glu	Leu	Ile	Leu	Met	Glu	Glu	Ile	Arg	Phe		
		355					360						365				
Pro	Arg	Thr	Leu	Gly	Pro	Glu	Ala	Lys	Ser	Leu	Leu	Ser	Gly	Leu	Leu		
	370					375						380					
Lys	Lys	Asp	Pro	Lys	Gln	Arg	Leu	Gly	Gly	Gly	Ser	Glu	Asp	Ala	Lys		
385					390						395				400		
Glu	Ile	Met	Gln	His	Arg	Phe	Phe	Ala	Gly	Ile	Val	Trp	Gln	His	Val		
			405						410					415			
Tyr	Glu	Lys	Lys	Leu	Ser	Pro	Pro	Phe	Lys	Pro	Gln	Val	Thr	Ser	Glu		
			420					425					430				
Thr	Asp	Thr	Arg	Tyr	Phe	Asp	Glu	Glu	Phe	Thr	Ala	Gln	Met	Ile	Thr		
		435					440						445				

Ile Thr Pro Pro Asp Gln Asp Asp Ser Met Glu Cys Val Asp Ser Glu  
 450 455 460

Arg Arg Pro His Phe Pro Gln Phe Ser Tyr Ser Ala Ser Ser Thr Ala  
 465 470 475 480

<210> 19

<211> 724

<212> PRT

<213> Homo sapiens

<400> 19

Met Ser Ala Glu Gly Tyr Gln Tyr Arg Ala Leu Tyr Asp Tyr Lys Lys  
 1 5 10 15

Glu Arg Glu Glu Asp Ile Asp Leu His Leu Gly Asp Ile Leu Thr Val  
 20 25 30

Asn Lys Gly Ser Leu Val Ala Leu Gly Phe Ser Asp Gly Gln Glu Ala  
 35 40 45

Arg Pro Glu Glu Ile Gly Trp Leu Asn Gly Tyr Asn Glu Thr Thr Gly  
 50 55 60

Glu Arg Gly Asp Phe Pro Gly Thr Tyr Val Glu Tyr Ile Gly Arg Lys

205570"59009001



65                      70                      75                      80

Lys Ile Ser Pro Pro Thr Pro Lys Pro Arg Pro Pro Arg Pro Leu Pro

85                      90                      95

Val Ala Pro Gly Ser Ser Lys Thr Glu Ala Asp Val Glu Gln Gln Ala

100                      105                      110

Leu Thr Leu Pro Asp Leu Ala Glu Gln Phe Ala Pro Pro Asp Ile Ala

115                      120                      125

Pro Pro Leu Leu Ile Lys Leu Val Glu Ala Ile Glu Lys Lys Gly Leu

130                      135                      140

Glu Cys Ser Thr Leu Tyr Arg Thr Gln Ser Ser Ser Asn Leu Ala Glu

145                      150                      155                      160

Leu Arg Gln Leu Leu Asp Cys Asp Thr Pro Ser Val Asp Leu Glu Met

165                      170                      175

Ile Asp Val His Val Leu Ala Asp Ala Phe Lys Arg Tyr Leu Leu Asp

180                      185                      190

Leu Pro Asn Pro Val Ile Pro Ala Ala Val Tyr Ser Glu Met Ile Ser

195                      200                      205

206270"59099001

Leu Ala Pro Glu Val Gln Ser Ser Glu Glu Tyr Ile Gln Leu Leu Lys

210

215

220

Lys Leu Ile Arg Ser Pro Ser Ile Pro His Gln Tyr Trp Leu Thr Leu

225

230

235

240

Gln Tyr Leu Leu Lys His Phe Phe Lys Leu Ser Gln Thr Ser Ser Lys

245

250

255

Asn Leu Leu Asn Ala Arg Val Leu Ser Glu Ile Phe Ser Pro Met Leu

260

265

270

Phe Arg Phe Ser Ala Ala Ser Ser Asp Asn Thr Glu Asn Leu Ile Lys

275

280

285

Val Ile Glu Ile Leu Ile Ser Thr Glu Trp Asn Glu Arg Gln Pro Ala

290

295

300

Pro Ala Leu Pro Pro Lys Pro Pro Lys Pro Thr Thr Val Ala Asn Asn

305

310

315

320

Gly Met Asn Asn Asn Met Ser Leu Gln Asn Ala Glu Trp Tyr Trp Gly

325

330

335

Asp Ile Ser Arg Glu Glu Val Asn Glu Lys Leu Arg Asp Thr Ala Asp

340

345

350

20060065 012900

Gly Thr Phe Leu Val Arg Asp Ala Ser Thr Lys Met His Gly Asp Tyr

355

360

365

Thr Leu Thr Leu Arg Lys Gly Gly Asn Asn Lys Leu Ile Lys Ile Phe

370

375

380

His Arg Asp Gly Lys Tyr Gly Phe Ser Asp Pro Leu Thr Phe Ser Ser

385

390

395

400

Val Val Glu Leu Ile Asn His Tyr Arg Asn Glu Ser Leu Ala Gln Tyr

405

410

415

Asn Pro Lys Leu Asp Val Lys Leu Leu Tyr Pro Val Ser Lys Tyr Gln

420

425

430

Gln Asp Gln Val Val Lys Glu Asp Asn Ile Glu Ala Val Gly Lys Lys

435

440

445

Leu His Glu Tyr Asn Thr Gln Phe Gln Glu Lys Ser Arg Glu Tyr Asp

450

455

460

Arg Leu Tyr Glu Glu Tyr Thr Arg Thr Ser Gln Glu Ile Gln Met Lys

465

470

475

480

Arg Thr Ala Ile Glu Ala Phe Asn Glu Thr Ile Lys Ile Phe Glu Glu

206210"59009001

495

510

525

540

560

575

590

605

620

Asn Val Gly Ser Ser Asn Arg Asn Lys Ala Glu Asn Leu Leu Arg Gly  
 625                      630                      635                      640

Lys Arg Asp Gly Thr Phe Leu Val Arg Glu Ser Ser Lys Gln Gly Cys  
                          645                      650                      655

Tyr Ala Cys Ser Val Val Val Asp Gly Glu Val Lys His Cys Val Ile  
                          660                      665                      670

Asn Lys Thr Ala Thr Gly Tyr Gly Phe Ala Glu Pro Tyr Asn Leu Tyr  
                          675                      680                      685

Ser Ser Leu Lys Glu Leu Val Leu His Tyr Gln His Thr Ser Leu Val  
                          690                      695                      700

Gln His Asn Asp Ser Leu Asn Val Thr Leu Ala Tyr Pro Val Tyr Ala  
 705                      710                      715                      720

Gln Gln Arg Arg

<210> 20

<211> 3056

<212> PRT

<213> Homo sapiens

2006-01-09 10:00:00

&lt;400&gt; 20

Met Ser Leu Val Leu Asn Asp Leu Leu Ile Cys Cys Arg Gln Leu Glu

1 5 10 15

His Asp Arg Ala Thr Glu Arg Lys Lys Glu Val Glu Lys Phe Lys Arg

20 25 30

Leu Ile Arg Asp Pro Glu Thr Ile Lys His Leu Asp Arg His Ser Asp

35 40 45

Ser Lys Gln Gly Lys Tyr Leu Asn Trp Asp Ala Val Phe Arg Phe Leu

50 55 60

Gln Lys Tyr Ile Gln Lys Glu Thr Glu Cys Leu Arg Ile Ala Lys Pro

65 70 75 80

Asn Val Ser Ala Ser Thr Gln Ala Ser Arg Gln Lys Lys Met Gln Glu

85 90 95

Ile Ser Ser Leu Val Lys Tyr Phe Ile Lys Cys Ala Asn Arg Arg Ala

100 105 110

Pro Arg Leu Lys Cys Gln Glu Leu Leu Asn Tyr Ile Met Asp Thr Val

115 120 125

206270" 5900500T

Lys Asp Ser Ser Asn Gly Ala Ile Tyr Gly Ala Asp Cys Ser Asn Ile  
 130 135 140

Leu Leu Lys Asp Ile Leu Ser Val Arg Lys Tyr Trp Cys Glu Ile Ser  
 145 150 155 160

Gln Gln Gln Trp Leu Glu Leu Phe Ser Val Tyr Phe Arg Leu Tyr Leu  
 165 170 175

Lys Pro Ser Gln Asp Val His Arg Val Leu Val Ala Arg Ile Ile His  
 180 185 190

Ala Val Thr Lys Gly Cys Cys Ser Gln Thr Asp Gly Leu Asn Ser Lys  
 195 200 205

Phe Leu Asp Phe Phe Ser Lys Ala Ile Gln Cys Ala Arg Gln Glu Lys  
 210 215 220

Ser Ser Ser Gly Leu Asn His Ile Leu Ala Ala Leu Thr Ile Phe Leu  
 225 230 235 240

Lys Thr Leu Ala Val Asn Phe Arg Ile Arg Val Cys Glu Leu Gly Asp  
 245 250 255

Glu Ile Leu Pro Thr Leu Leu Tyr Ile Trp Thr Gln His Arg Leu Asn  
 260 265 270

206270" 59009007

Asp Ser Leu Lys Glu Val Ile Ile Glu Leu Phe Gln Leu Gln Ile Tyr

275

280

285

Ile His His Pro Lys Gly Ala Lys Thr Gln Glu Lys Gly Ala Tyr Glu

290

295

300

Ser Thr Lys Trp Arg Ser Ile Leu Tyr Asn Leu Tyr Asp Leu Leu Val

305

310

315

320

Asn Glu Ile Ser His Ile Gly Ser Arg Gly Lys Tyr Ser Ser Gly Phe

325

330

335

Arg Asn Ile Ala Val Lys Glu Asn Leu Ile Glu Leu Met Ala Asp Ile

340

345

350

Cys His Gln Val Phe Asn Glu Asp Thr Arg Ser Leu Glu Ile Ser Gln

355

360

365

Ser Tyr Thr Thr Thr Gln Arg Glu Ser Ser Asp Tyr Ser Val Pro Cys

370

375

380

Lys Arg Lys Lys Ile Glu Leu Gly Trp Glu Val Ile Lys Asp His Leu

385

390

395

400

Gln Lys Ser Gln Asn Asp Phe Asp Leu Val Pro Trp Leu Gln Ile Ala

206210"59009007



405

410

415

Thr Gln Leu Ile Ser Lys Tyr Pro Ala Ser Leu Pro Asn Cys Glu Leu

420

425

430

Ser Pro Leu Leu Met Ile Leu Ser Gln Leu Leu Pro Gln Gln Arg His

435

440

445

Gly Glu Arg Thr Pro Tyr Val Leu Arg Cys Leu Thr Glu Val Ala Leu

450

455

460

Cys Gln Asp Lys Arg Ser Asn Leu Glu Ser Ser Gln Lys Ser Asp Leu

465

470

475

480

Leu Lys Leu Trp Asn Lys Ile Trp Cys Ile Thr Phe Arg Gly Ile Ser

485

490

495

Ser Glu Gln Ile Gln Ala Glu Asn Phe Gly Leu Leu Gly Ala Ile Ile

500

505

510

Gln Gly Ser Leu Val Glu Val Asp Arg Glu Phe Trp Lys Leu Phe Thr

515

520

525

Gly Ser Ala Cys Arg Pro Ser Cys Pro Ala Val Cys Cys Leu Thr Leu

530

535

540

20250303 10:00:00

Ala Leu Thr Thr Ser Ile Val Pro Gly Ala Val Lys Met Gly Ile Glu  
 545 550 555 560

Gln Asn Met Cys Glu Val Asn Arg Ser Phe Ser Leu Lys Glu Ser Ile  
 565 570 575

Met Lys Trp Leu Leu Phe Tyr Gln Leu Glu Gly Asp Leu Glu Asn Ser  
 580 585 590

Thr Glu Val Pro Pro Ile Leu His Ser Asn Phe Pro His Leu Val Leu  
 595 600 605

Glu Lys Ile Leu Val Ser Leu Thr Met Lys Asn Cys Lys Ala Ala Met  
 610 615 620

Asn Phe Phe Gln Ser Val Pro Glu Cys Glu His His Gln Lys Asp Lys  
 625 630 635 640

Glu Glu Leu Ser Phe Ser Glu Val Glu Glu Leu Phe Leu Gln Thr Thr  
 645 650 655

Phe Asp Lys Met Asp Phe Leu Thr Ile Val Arg Glu Cys Gly Ile Glu  
 660 665 670

Lys His Gln Ser Ser Ile Gly Phe Ser Val His Gln Asn Leu Lys Glu  
 675 680 685

Asp Ile Cys Lys Ser Leu Ala Ser Phe Ile Lys Lys Pro Phe Asp Arg

	820	825	830
Gly Glu Val Glu Ser Met Glu Asp Asp Thr Asn Gly Asn Leu Met Glu			
835	840	845	
Val Glu Asp Gln Ser Ser Met Asn Leu Phe Asn Asp Tyr Pro Asp Ser			
850	855	860	
Ser Val Ser Asp Ala Asn Glu Pro Gly Glu Ser Gln Ser Thr Ile Gly			
865	870	875	880
Ala Ile Asn Pro Leu Ala Glu Glu Tyr Leu Ser Lys Gln Asp Leu Leu			
885	890	895	
Phe Leu Asp Met Leu Lys Phe Leu Cys Leu Cys Val Thr Thr Ala Gln			
900	905	910	
Thr Asn Thr Val Ser Phe Arg Ala Ala Asp Ile Arg Arg Lys Leu Leu			
915	920	925	
Met Leu Ile Asp Ser Ser Thr Leu Glu Pro Thr Lys Ser Leu His Leu			
930	935	940	
His Met Tyr Leu Met Leu Leu Lys Glu Leu Pro Gly Glu Glu Tyr Pro			
945	950	955	960

20060605 013903

Ala Ala Glu Ser Ile Asn Arg Leu Phe Gln Asp Thr Lys Gly Asp Ser  
1090 1095 1100

Ser Arg Leu Leu Lys Ala Leu Pro Leu Lys Leu Gln Gln Thr Ala Phe  
 1105 1110 1115 1120

Glu Asn Ala Tyr Leu Lys Ala Gln Glu Gly Met Arg Glu Met Ser His  
 1125 1130 1135

Ser Ala Glu Asn Pro Glu Thr Leu Asp Glu Ile Tyr Asn Arg Lys Ser  
 1140 1145 1150

Val Leu Leu Thr Leu Ile Ala Val Val Leu Ser Cys Ser Pro Ile Cys  
 1155 1160 1165

Glu Lys Gln Ala Leu Phe Ala Leu Cys Lys Ser Val Lys Glu Asn Gly  
 1170 1175 1180

Leu Glu Pro His Leu Val Lys Lys Val Leu Glu Lys Val Ser Glu Thr  
 1185 1190 1195 1200

Phe Gly Tyr Arg Arg Leu Glu Asp Phe Met Ala Ser His Leu Asp Tyr  
 1205 1210 1215

Leu Val Leu Glu Trp Leu Asn Leu Gln Asp Thr Glu Tyr Asn Leu Ser  
 1220 1225 1230

Ser Phe Pro Phe Ile Leu Leu Asn Tyr Thr Asn Ile Glu Asp Phe Tyr

2025-10-29 10:59:09

1235

1240

1245

Arg Ser Cys Tyr Lys Val Leu Ile Pro His Leu Val Ile Arg Ser His

1250

1255

1260

Phe Asp Glu Val Lys Ser Ile Ala Asn Gln Ile Gln Glu Asp Trp Lys

1265

1270

1275

1280

Ser Leu Leu Thr Asp Cys Phe Pro Lys Ile Leu Val Asn Ile Leu Pro

1285

1290

1295

Tyr Phe Ala Tyr Glu Gly Thr Arg Asp Ser Gly Met Ala Gln Gln Arg

1300

1305

1310

Glu Thr Ala Thr Lys Val Tyr Asp Met Leu Lys Ser Glu Asn Leu Leu

1315

1320

1325

Gly Lys Gln Ile Asp His Leu Phe Ile Ser Asn Leu Pro Glu Ile Val

1330

1335

1340

Val Glu Leu Leu Met Thr Leu His Glu Pro Ala Asn Ser Ser Ala Ser

1345

1350

1355

1360

Gln Ser Thr Asp Leu Cys Asp Phe Ser Gly Asp Leu Asp Pro Ala Pro

1365

1370

1375

20060610 1230

Asn Pro Pro His Phe Pro Ser His Val Ile Lys Ala Thr Phe Ala Tyr  
 1380 1385 1390

Ile Ser Asn Cys His Lys Thr Lys Leu Lys Ser Ile Leu Glu Ile Leu  
 1395 1400 1405

Ser Lys Ser Pro Asp Ser Tyr Gln Lys Ile Leu Leu Ala Ile Cys Glu  
 1410 1415 1420

Gln Ala Ala Glu Thr Asn Asn Val Tyr Lys Lys His Arg Ile Leu Lys  
 1425 1430 1435 1440

Ile Tyr His Leu Phe Val Ser Leu Leu Leu Lys Asp Ile Lys Ser Gly  
 1445 1450 1455

Leu Gly Gly Ala Trp Ala Phe Val Leu Arg Asp Val Ile Tyr Thr Leu  
 1460 1465 1470

Ile His Tyr Ile Asn Gln Arg Pro Ser Cys Ile Met Asp Val Ser Leu  
 1475 1480 1485

Arg Ser Phe Ser Leu Cys Cys Asp Leu Leu Ser Gln Val Cys Gln Thr  
 1490 1495 1500

Ala Val Thr Tyr Cys Lys Asp Ala Leu Glu Asn His Leu His Val Ile  
 1505 1510 1515 1520

206210-59099001



Val Gly Thr Leu Ile Pro Leu Val Tyr Glu Gln Val Glu Val Gln Lys  
 1525 1530 1535

Gln Val Leu Asp Leu Leu Lys Tyr Leu Val Ile Asp Asn Lys Asp Asn  
 1540 1545 1550

Glu Asn Leu Tyr Ile Thr Ile Lys Leu Leu Asp Pro Phe Pro Asp His  
 1555 1560 1565

Val Val Phe Lys Asp Leu Arg Ile Thr Gln Gln Lys Ile Lys Tyr Ser  
 1570 1575 1580

Arg Gly Pro Phe Ser Leu Leu Glu Glu Ile Asn His Phe Leu Ser Val  
 1585 1590 1595 1600

Ser Val Tyr Asp Ala Leu Pro Leu Thr Arg Leu Glu Gly Leu Lys Asp  
 1605 1610 1615

Leu Arg Arg Gln Leu Glu Leu His Lys Asp Gln Met Val Asp Ile Met  
 1620 1625 1630

Arg Ala Ser Gln Asp Asn Pro Gln Asp Gly Ile Met Val Lys Leu Val  
 1635 1640 1645

Val Asn Leu Leu Gln Leu Ser Lys Met Ala Ile Asn His Thr Gly Glu

206270 5009007

1650

1655

1660

Lys Glu Val Leu Glu Ala Val Gly Ser Cys Leu Gly Glu Val Gly Pro

1665

1670

1675

1680

Ile Asp Phe Ser Thr Ile Ala Ile Gln His Ser Lys Asp Ala Ser Tyr

1685

1690

1695

Thr Lys Ala Leu Lys Leu Phe Glu Asp Lys Glu Leu Gln Trp Thr Phe

1700

1705

1710

Ile Met Leu Thr Tyr Leu Asn Asn Thr Leu Val Glu Asp Cys Val Lys

1715

1720

1725

Val Arg Ser Ala Ala Val Thr Cys Leu Lys Asn Ile Leu Ala Thr Lys

1730

1735

1740

Thr Gly His Ser Phe Trp Glu Ile Tyr Lys Met Thr Thr Asp Pro Met

1745

1750

1755

1760

Leu Ala Tyr Leu Gln Pro Phe Arg Thr Ser Arg Lys Lys Phe Leu Glu

1765

1770

1775

Val Pro Arg Phe Asp Lys Glu Asn Pro Phe Glu Gly Leu Asp Asp Ile

1780

1785

1790

205270" 58009007

Asn Leu Trp Ile Pro Leu Ser Glu Asn His Asp Ile Trp Ile Lys Thr  
 1795 1800 1805

Leu Thr Cys Ala Phe Leu Asp Ser Gly Gly Thr Lys Cys Glu Ile Leu  
 1810 1815 1820

Gln Leu Leu Lys Pro Met Cys Glu Val Lys Thr Asp Phe Cys Gln Thr  
 1825 1830 1835 1840

Val Leu Pro Tyr Leu Ile His Asp Ile Leu Leu Gln Asp Thr Asn Glu  
 1845 1850 1855

Ser Trp Arg Asn Leu Leu Ser Thr His Val Gln Gly Phe Phe Thr Ser  
 1860 1865 1870

Cys Leu Arg His Phe Ser Gln Thr Ser Arg Ser Thr Thr Pro Ala Asn  
 1875 1880 1885

Leu Asp Ser Glu Ser Glu His Phe Phe Arg Cys Cys Leu Asp Lys Lys  
 1890 1895 1900

Ser Gln Arg Thr Met Leu Ala Val Val Asp Tyr Met Arg Arg Gln Lys  
 1905 1910 1915 1920

Arg Pro Ser Ser Gly Thr Ile Phe Asn Asp Ala Phe Trp Leu Asp Leu  
 1925 1930 1935

206270"5909001

Ile Gln Ala Leu Gln Asn Leu Gly Leu Cys His Ile Leu Ser Val Tyr

2065	2070	2075	2080
Leu Lys Gly Leu Asp Tyr Glu Asn Lys Asp Trp Cys Pro Glu Leu Glu			
	2085	2090	2095
Glu Leu His Tyr Gln Ala Ala Trp Arg Asn Met Gln Trp Asp His Cys			
	2100	2105	2110
Thr Ser Val Ser Lys Glu Val Glu Gly Thr Ser Tyr His Glu Ser Leu			
	2115	2120	2125
Tyr Asn Ala Leu Gln Ser Leu Arg Asp Arg Glu Phe Ser Thr Phe Tyr			
	2130	2135	2140
Glu Ser Leu Lys Tyr Ala Arg Val Lys Glu Val Glu Glu Met Cys Lys			
2145	2150	2155	2160
Arg Ser Leu Glu Ser Val Tyr Ser Leu Tyr Pro Thr Leu Ser Arg Leu			
	2165	2170	2175
Gln Ala Ile Gly Glu Leu Glu Ser Ile Gly Glu Leu Phe Ser Arg Ser			
	2180	2185	2190
Val Thr His Arg Gln Leu Ser Glu Val Tyr Ile Lys Trp Gln Lys His			
	2195	2200	2205

2062TD"5909900T

Ser Gln Leu Leu Lys Asp Ser Asp Phe Ser Phe Gln Glu Pro Ile Met  
 2210 2215 2220

Ala Leu Arg Thr Val Ile Leu Glu Ile Leu Met Glu Lys Glu Met Asp  
 2225 2230 2235 2240

Asn Ser Gln Arg Glu Cys Ile Lys Asp Ile Leu Thr Lys His Leu Val  
 2245 2250 2255

Glu Leu Ser Ile Leu Ala Arg Thr Phe Lys Asn Thr Gln Leu Pro Glu  
 2260 2265 2270

Arg Ala Ile Phe Gln Ile Lys Gln Tyr Asn Ser Val Ser Cys Gly Val  
 2275 2280 2285

Ser Glu Trp Gln Leu Glu Glu Ala Gln Val Phe Trp Ala Lys Lys Glu  
 2290 2295 2300

Gln Ser Leu Ala Leu Ser Ile Leu Lys Gln Met Ile Lys Lys Leu Asp  
 2305 2310 2315 2320

Ala Ser Cys Ala Ala Asn Asn Pro Ser Leu Lys Leu Thr Tyr Thr Glu  
 2325 2330 2335

Cys Leu Arg Val Cys Gly Asn Trp Leu Ala Glu Thr Cys Leu Glu Asn  
 2340 2345 2350

206210 59009001

Pro Ala Val Ile Met Gln Thr Tyr Leu Glu Lys Ala Val Glu Val Ala

2355

2360

2365

Gly Asn Tyr Asp Gly Glu Ser Ser Asp Glu Leu Arg Asn Gly Lys Met

2370

2375

2380

Lys Ala Phe Leu Ser Leu Ala Arg Phe Ser Asp Thr Gln Tyr Gln Arg

2385

2390

2395

2400

Ile Glu Asn Tyr Met Lys Ser Ser Glu Phe Glu Asn Lys Gln Ala Leu

2405

2410

2415

Leu Lys Arg Ala Lys Glu Glu Val Gly Leu Leu Arg Glu His Lys Ile

2420

2425

2430

Gln Thr Asn Arg Tyr Thr Val Lys Val Gln Arg Glu Leu Glu Leu Asp

2435

2440

2445

Glu Leu Ala Leu Arg Ala Leu Lys Glu Asp Arg Lys Arg Phe Leu Cys

2450

2455

2460

Lys Ala Val Glu Asn Tyr Ile Asn Cys Leu Leu Ser Gly Glu Glu His

2465

2470

2475

2480

Asp Met Trp Val Phe Arg Leu Cys Ser Leu Trp Leu Glu Asn-Ser Gly

206210"5900900T

2485

2490

2495

Val Ser Glu Val Asn Gly Met Met Lys Arg Asp Gly Met Lys Ile Pro

2500

2505

2510

Thr Tyr Lys Phe Leu Pro Leu Met Tyr Gln Leu Ala Ala Arg Met Gly

2515

2520

2525

Thr Lys Met Met Gly Gly Leu Gly Phe His Glu Val Leu Asn Asn Leu

2530

2535

2540

Ile Ser Arg Ile Ser Met Asp His Pro His His Thr Leu Phe Ile Ile

2545

2550

2555

2560

Leu Ala Leu Ala Asn Ala Asn Arg Asp Glu Phe Leu Thr Lys Pro Glu

2565

2570

2575

Val Ala Arg Arg Ser Arg Ile Thr Lys Asn Val Pro Lys Gln Ser Ser

2580

2585

2590

Gln Leu Asp Glu Asp Arg Thr Glu Ala Ala Asn Arg Ile Ile Cys Thr

2595

2600

2605

Ile Arg Ser Arg Arg Pro Gln Met Val Arg Ser Val Glu Ala Leu Cys

2610

2615

2620

206210 5009001



Asp Ala Tyr Ile Ile Leu Ala Asn Leu Asp Ala Thr Gln Trp Lys Thr  
 2625                      2630                      2635                      2640 ~

Gln Arg Lys Gly Ile Asn Ile Pro Ala Asp Gln Pro Ile Thr Lys Leu  
                             2645                      2650                      2655

Lys Asn Leu Glu Asp Val Val Val Pro Thr Met Glu Ile Lys Val Asp  
                             2660                      2665                      2670

His Thr Gly Glu Tyr Gly Asn Leu Val Thr Ile Gln Ser Phe Lys Ala  
                             2675                      2680                      2685

Glu Phe Arg Leu Ala Gly Gly Val Asn Leu Pro Lys Ile Ile Asp Cys  
                             2690                      2695                      2700

Val Gly Ser Asp Gly Lys Glu Arg Arg Gln Leu Val Lys Gly Arg Asp  
 2705                      2710                      2715                      2720

Asp Leu Arg Gln Asp Ala Val Met Gln Gln Val Phe Gln Met Cys Asn  
                             2725                      2730                      2735

Thr Leu Leu Gln Arg Asn Thr Glu Thr Arg Lys Arg Lys Leu Thr Ile  
                             2740                      2745                      2750

Cys Thr Tyr Lys Val Val Pro Leu Ser Gln Arg Ser Gly Val Leu Glu  
                             2755                      2760                      2765

206210"590900T

Trp Cys Thr Gly Thr Val Pro Ile Gly Glu Phe Leu Val Asn Asn Glu  
 2770 2775 2780

Asp Gly Ala His Lys Arg Tyr Arg Pro Asn Asp Phe Ser Ala Phe Gln  
 2785 2790 2795 2800

Cys Gln Lys Lys Met Met Glu Val Gln Lys Lys Ser Phe Glu Glu Lys  
 2805 2810 2815

Tyr Glu Val Phe Met Asp Val Cys Gln Asn Phe Gln Pro Val Phe Arg  
 2820 2825 2830

Tyr Phe Cys Met Glu Lys Phe Leu Asp Pro Ala Ile Trp Phe Glu Lys  
 2835 2840 2845

Arg Leu Ala Tyr Thr Arg Ser Val Ala Thr Ser Ser Ile Val Gly Tyr  
 2850 2855 2860

Ile Leu Gly Leu Gly Asp Arg His Val Gln Asn Ile Leu Ile Asn Glu  
 2865 2870 2875 2880

Gln Ser Ala Glu Leu Val His Ile Asp Leu Gly Val Ala Phe Glu Gln  
 2885 2890 2895

Gly Lys Ile Leu Pro Thr Pro Glu Thr Val Pro Phe Arg Leu Thr Arg

2025-10-29 10:59:00

2900

2905

2910

Asp Ile Val Asp Gly Met Gly Ile Thr Gly Val Glu Gly Val Phe Arg

2915

2920

2925

Arg Cys Cys Glu Lys Thr Met Glu Val Met Arg Asn Ser Gln Glu Thr

2930

2935

2940

Leu Leu Thr Ile Val Glu Val Leu Leu Tyr Asp Pro Leu Phe Asp Trp

2945

2950

2955

2960

Thr Met Asn Pro Leu Lys Ala Leu Tyr Leu Gln Gln Arg Pro Glu Asp

2965

2970

2975

Glu Thr Glu Leu His Pro Thr Leu Asn Ala Asp Asp Gln Glu Cys Lys

2980

2985

2990

Arg Asn Leu Ser Asp Ile Asp Gln Ser Phe Asp Lys Val Ala Glu Arg

2995

3000

3005

Val Leu Met Arg Leu Gln Glu Lys Leu Lys Gly Val Glu Glu Gly Thr

3010

3015

3020

Val Leu Ser Val Gly Gly Gln Val Asn Leu Leu Ile Gln Gln Ala Ile

3025

3030

3035

3040

206270"59009007

Asp Pro Lys Asn Leu Ser Arg Leu Phe Pro Gly Trp Lys Ala Trp Val

3045

3050

3055

&lt;210&gt; 21

&lt;211&gt; 450

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 21

Met Ser Ala Ile Gln Ala Ala Trp Pro Ser Gly Thr Glu Cys Ile Ala

1

5

10

15

Lys Tyr Asn Phe His Gly Thr Ala Glu Gln Asp Leu Pro Phe Cys Lys

20

25

30

Gly Asp Val Leu Thr Ile Val Ala Val Thr Lys Asp Pro Asn Trp Tyr

35

40

45

Lys Ala Lys Asn Lys Val Gly Arg Glu Gly Ile Ile Pro Ala Asn Tyr

50

55

60

Val Gln Lys Arg Glu Gly Val Lys Ala Gly Thr Lys Leu Ser Leu Met

65

70

75

80

20250909 09:00:00

Pro Trp Phe His Gly Lys Ile Thr Arg Glu Gln Ala Glu Arg Leu Leu  
                             85                            90                            95

Tyr Pro Pro Glu Thr Gly Leu Phe Leu Val Arg Glu Ser Thr Asn Tyr  
                             100                            105                            110

Pro Gly Asp Tyr Thr Leu Cys Val Ser Cys Asp Gly Lys Val Glu His  
                             115                            120                            125

Tyr Arg Ile Met Tyr His Ala Ser Lys Leu Ser Ile Asp Glu Glu Val  
                             130                            135                            140

Tyr Phe Glu Asn Leu Met Gln Leu Val Glu His Tyr Thr Ser Asp Ala  
                             145                            150                            155                            160

Asp Gly Leu Cys Thr Arg Leu Ile Lys Pro Lys Val Met Glu Gly Thr  
                             165                            170                            175

Val Ala Ala Gln Asp Glu Phe Tyr Arg Ser Gly Trp Ala Leu Asn Met  
                             180                            185                            190

Lys Glu Leu Lys Leu Leu Gln Thr Ile Gly Lys Gly Glu Phe Gly Asp  
                             195                            200                            205

Val Met Leu Gly Asp Tyr Arg Gly Asn Lys Val Ala Val Lys Cys Ile  
                             210                            215                            220

206270" 59009007

Lys Asn Asp Ala Thr Ala Gln Ala Phe Leu Ala Glu Ala Ser Val Met  
225 230 235 240

Thr Gln Leu Arg His Ser Asn Leu Val Gln Leu Leu Gly Val Ile Val  
245 250 255

Glu Glu Lys Gly Gly Leu Tyr Ile Val Thr Glu Tyr Met Ala Lys Gly  
260 265 270

Ser Leu Val Asp Tyr Leu Arg Ser Arg Gly Arg Ser Val Leu Gly Gly  
275 280 285

Asp Cys Leu Leu Lys Phe Ser Leu Asp Val Cys Glu Ala Met Glu Tyr  
290 295 300

Leu Glu Gly Asn Asn Phe Val His Arg Asp Leu Ala Ala Arg Asn Val  
305 310 315 320

Leu Val Ser Glu Asp Asn Val Ala Lys Val Ser Asp Phe Gly Leu Thr  
325 330 335

Lys Glu Ala Ser Ser Thr Gln Asp Thr Gly Lys Leu Pro Val Lys Trp  
340 345 350

Thr Ala Pro Glu Ala Leu Arg Glu Lys Lys Phe Ser Thr Lys Ser Asp

206210" 5900900F

355

360

365

Val Trp Ser Phe Gly Ile Leu Leu Trp Glu Ile Tyr Ser Phe Gly Arg

370

375

380

Val Pro Tyr Pro Arg Ile Pro Leu Lys Asp Val Val Pro Arg Val Glu

385

390

395

400

Lys Gly Tyr Lys Met Asp Ala Pro Asp Gly Cys Pro Pro Ala Val Tyr

405

410

415

Glu Val Met Lys Asn Cys Trp His Leu Asp Ala Ala Met Arg Pro Ser

420

425

430

Phe Leu Gln Leu Arg Glu Gln Leu Glu His Ile Lys Thr His Glu Leu

435

440

445

His Leu

450

&lt;210&gt; 22

&lt;211&gt; 1142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

206270" 5909907

&lt;400&gt; 22

Met Ala Phe Cys Ala Lys Met Arg Ser Ser Lys Lys Thr Glu Val Asn

1 5 10 15

Leu Glu Ala Pro Glu Pro Gly Val Glu Val Ile Phe Tyr Leu Ser Asp

20 25 30

Arg Glu Pro Leu Arg Leu Gly Ser Gly Glu Tyr Thr Ala Glu Glu Leu

35 40 45

Cys Ile Arg Ala Ala Gln Ala Cys Arg Ile Ser Pro Leu Cys His Asn

50 55 60

Leu Phe Ala Leu Tyr Asp Glu Asn Thr Lys Leu Trp Tyr Ala Pro Asn

65 70 75 80

Arg Thr Ile Thr Val Asp Asp Lys Met Ser Leu Arg Leu His Tyr Arg

85 90 95

Met Arg Phe Tyr Phe Thr Asn Trp His Gly Thr Asn Asp Asn Glu Gln

100 105 110

Ser Val Trp Arg His Ser Pro Lys Lys Gln Lys Asn Gly Tyr Glu Lys

115 120 125

Lys Lys Ile Pro Asp Ala Thr Pro Leu Leu Asp Ala Ser Ser Leu Glu

206210"59099007



130

135

140

Tyr Leu Phe Ala Gln Gly Gln Tyr Asp Leu Val Lys Cys Leu Ala Pro

145

150

155

160

Ile Arg Asp Pro Lys Thr Glu Gln Asp Gly His Asp Ile Glu Asn Glu

165

170

175

Cys Leu Gly Met Ala Val Leu Ala Ile Ser His Tyr Ala Met Met Lys

180

185

190

Lys Met Gln Leu Pro Glu Leu Pro Lys Asp Ile Ser Tyr Lys Arg Tyr

195

200

205

Ile Pro Glu Thr Leu Asn Lys Ser Ile Arg Gln Arg Asn Leu Leu Thr

210

215

220

Arg Met Arg Ile Asn Asn Val Phe Lys Asp Phe Leu Lys Glu Phe Asn

225

230

235

240

Asn Lys Thr Ile Cys Asp Ser Ser Val Ser Thr His Asp Leu Lys Val

245

250

255

Lys Tyr Leu Ala Thr Leu Glu Thr Leu Thr Lys His Tyr Gly Ala Glu

260

265

270

2006065.012902

Phe Arg Leu Thr Ala Asp Ala His His Tyr Leu Cys Thr Asp Val Ala  
405 410 415

Ala Thr Lys Lys Ala Gln Glu Trp Gln Pro Val Tyr Pro Met Ser Gln

545

550

555

560

Leu Ser Phe Asp Arg Ile Leu Lys Lys Asp Leu Val Gln Gly Glu His

565

570

575

Leu Gly Arg Gly Thr Arg Thr His Ile Tyr Ser Gly Thr Leu Met Asp

580

585

590

Tyr Lys Asp Asp Glu Gly Thr Ser Glu Glu Lys Lys Ile Lys Val Ile

595

600

605

Leu Lys Val Leu Asp Pro Ser His Arg Asp Ile Ser Leu Ala Phe Phe

610

615

620

Glu Ala Ala Ser Met Met Arg Gln Val Ser His Lys His Ile Val Tyr

625

630

635

640

Leu Tyr Gly Val Cys Val Arg Asp Val Glu Asn Ile Met Val Glu Glu

645

650

655

Phe Val Glu Gly Gly Pro Leu Asp Leu Phe Met His Arg Lys Ser Asp

660

665

670

Val Leu Thr Thr Pro Trp Lys Phe Lys Val Ala Lys Gln Leu Ala Ser

675

680

685

20250509001

Ala Leu Ser Tyr Leu Glu Asp Lys Asp Leu Val His Gly Asn Val Cys  
 690 695 700

Thr Lys Asn Leu Leu Leu Ala Arg Glu Gly Ile Asp Ser Glu Cys Gly  
 705 710 715 720

Pro Phe Ile Lys Leu Ser Asp Pro Gly Ile Pro Ile Thr Val Leu Ser  
 725 730 735

Arg Gln Glu Cys Ile Glu Arg Ile Pro Trp Ile Ala Pro Glu Cys Val  
 740 745 750

Glu Asp Ser Lys Asn Leu Ser Val Ala Ala Asp Lys Trp Ser Phe Gly  
 755 760 765

Thr Thr Leu Trp Glu Ile Cys Tyr Asn Gly Glu Ile Pro Leu Lys Asp  
 770 775 780

Lys Thr Leu Ile Glu Lys Glu Arg Phe Tyr Glu Ser Arg Cys Arg Pro  
 785 790 795 800

Val Thr Pro Ser Cys Lys Glu Leu Ala Asp Leu Met Thr Arg Cys Met  
 805 810 815

Asn Tyr Asp Pro Asn Gln Arg Pro Phe Phe Arg Ala Ile Met Arg Asp  
 820 825 830

206270" 5000000F

Ile Asn Lys Leu Glu Glu Gln Asn Pro Asp Ile Val Ser Arg Lys Lys

835

840

845

Asn Gln Pro Thr Glu Val Asp Pro Thr His Phe Glu Lys Arg Phe Leu

850

855

860

Lys Arg Ile Arg Asp Leu Gly Glu Gly His Phe Gly Lys Val Glu Leu

865

870

875

880

Cys Arg Tyr Asp Pro Glu Asp Asn Thr Gly Glu Gln Val Ala Val Lys

885

890

895

Ser Leu Lys Pro Glu Ser Gly Gly Asn His Ile Ala Asp Leu Lys Lys

900

905

910

Glu Ile Glu Ile Leu Arg Asn Leu Tyr His Glu Asn Ile Val Lys Tyr

915

920

925

Lys Gly Ile Cys Thr Glu Asp Gly Gly Asn Gly Ile Lys Leu Ile Met

930

935

940

Glu Phe Leu Pro Ser Gly Ser Leu Lys Glu Tyr Leu Pro Lys Asn Lys

945

950

955

960

Asn Lys Ile Asn Leu Lys Gln Gln Leu Lys Tyr Ala Val Gln Ile Cys

206270" 59009007

965

970

975

Lys Gly Met Asp Tyr Leu Gly Ser Arg Gln Tyr Val His Arg Asp Leu

980

985

990

Ala Ala Arg Asn Val Leu Val Glu Ser Glu His Gln Val Lys Ile Gly

995

1000

1005

Asp Phe Gly Leu Thr Lys Ala Ile Glu Thr Asp Lys Glu Tyr Tyr Thr

1010

1015

1020

Val Lys Asp Asp Arg Asp Ser Pro Val Phe Trp Tyr Ala Pro Glu Cys

1025

1030

1035

1040

Leu Met Gln Ser Lys Phe Tyr Ile Ala Ser Asp Val Trp Ser Phe Gly

1045

1050

1055

Val Thr Leu His Glu Leu Leu Thr Tyr Cys Asp Ser Asp Ser Ser Pro

1060

1065

1070

Met Ala Leu Phe Leu Lys Met Ile Gly Pro Thr His Gly Gln Met Thr

1075

1080

1085

Val Thr Arg Leu Val Asn Thr Leu Lys Glu Gly Lys Arg Leu Pro Cys

1090

1095

1100

206270"59009001

Pro Pro Asn Cys Pro Asp Glu Val Tyr Gln Leu Met Arg Lys Cys Trp  
 1105 1110 1115 1120

Glu Phe Gln Pro Ser Asn Arg Thr Ser Phe Gln Asn Leu Ile Glu Gly  
 1125 1130 1135

Phe Glu Ala Leu Leu Lys  
 1140

<210> 23

<211> 1338

<212> PRT

<213> Homo sapiens

<400> 23

Met Val Ser Tyr Trp Asp Thr Gly Val Leu Leu Cys Ala Leu Leu Ser  
 1 5 10 15

Cys Leu Leu Leu Thr Gly Ser Ser Ser Gly Ser Lys Leu Lys Asp Pro  
 20 25 30

Glu Leu Ser Leu Lys Gly Thr Gln His Ile Met Gln Ala Gly Gln Thr  
 35 40 45

Leu His Leu Gln Cys Arg Gly Glu Ala Ala His Lys Trp Ser Leu Pro



50

55

60

Glu Met Val Ser Lys Glu Ser Glu Arg Leu Ser Ile Thr Lys Ser Ala

65

70

75

80

Cys Gly Arg Asn Gly Lys Gln Phe Cys Ser Thr Leu Thr Leu Asn Thr

85

90

95

Ala Gln Ala Asn His Thr Gly Phe Tyr Ser Cys Lys Tyr Leu Ala Val

100

105

110

Pro Thr Ser Lys Lys Lys Glu Thr Glu Ser Ala Ile Tyr Ile Phe Ile

115

120

125

Ser Asp Thr Gly Arg Pro Phe Val Glu Met Tyr Ser Glu Ile Pro Glu

130

135

140

Ile Ile His Met Thr Glu Gly Arg Glu Leu Val Ile Pro Cys Arg Val

145

150

155

160

Thr Ser Pro Asn Ile Thr Val Thr Leu Lys Lys Phe Pro Leu Asp Thr

165

170

175

Leu Ile Pro Asp Gly Lys Arg Ile Ile Trp Asp Ser Arg Lys Gly Phe

180

185

190

20250707 09:00:00

Ile Ile Ser Asn Ala Thr Tyr Lys Glu Ile Gly Leu Leu Thr Cys Glu  
 195 200 205

Ala Thr Val Asn Gly His Leu Tyr Lys Thr Asn Tyr Leu Thr His Arg  
 210 215 220

Gln Thr Asn Thr Ile Ile Asp Val Gln Ile Ser Thr Pro Arg Pro Val  
 225 230 235 240

Lys Leu Leu Arg Gly His Thr Leu Val Leu Asn Cys Thr Ala Thr Thr  
 245 250 255

Pro Leu Asn Thr Arg Val Gln Met Thr Trp Ser Tyr Pro Asp Glu Lys  
 260 265 270

Asn Lys Arg Ala Ser Val Arg Arg Arg Ile Asp Gln Ser Asn Ser His  
 275 280 285

Ala Asn Ile Phe Tyr Ser Val Leu Thr Ile Asp Lys Met Gln Asn Lys  
 290 295 300

Asp Lys Gly Leu Tyr Thr Cys Arg Val Arg Ser Gly Pro Ser Phe Lys  
 305 310 315 320

Ser Val Asn Thr Ser Val His Ile Tyr Asp Lys Ala Phe Ile Thr Val  
 325 330 335

206370"590900F

Lys His Arg Lys Gln Gln Val Leu Glu Thr Val Ala Gly Lys Arg Ser  
 340 345 350

Tyr Arg Leu Ser Met Lys Val Lys Ala Phe Pro Ser Pro Glu Val Val  
 355 360 365

Trp Leu Lys Asp Gly Leu Pro Ala Thr Glu Lys Ser Ala Arg Tyr Leu  
 370 375 380

Thr Arg Gly Tyr Ser Leu Ile Ile Lys Asp Val Thr Glu Glu Asp Ala  
 385 390 395 400

Gly Asn Tyr Thr Ile Leu Leu Ser Ile Lys Gln Ser Asn Val Phe Lys  
 405 410 415

Asn Leu Thr Ala Thr Leu Ile Val Asn Val Lys Pro Gln Ile Tyr Glu  
 420 425 430

Lys Ala Val Ser Ser Phe Pro Asp Pro Ala Leu Tyr Pro Leu Gly Ser  
 435 440 445

Arg Gln Ile Leu Thr Cys Thr Ala Tyr Gly Ile Pro Gln Pro Thr Ile  
 450 455 460

Lys Trp Phe Trp His Pro Cys Asn His Asn His Ser Glu Ala Arg Cys

20250610 10:29:02

465	470	475	480
Asp Phe Cys Ser Asn Asn Glu Glu Ser Phe Ile Leu Asp Ala Asp Ser			
	485	490	495
Asn Met Gly Asn Arg Ile Glu Ser Ile Thr Gln Arg Met Ala Ile Ile			
	500	505	510
Glu Gly Lys Asn Lys Met Ala Ser Thr Leu Val Val Ala Asp Ser Arg			
	515	520	525
Ile Ser Gly Ile Tyr Ile Cys Ile Ala Ser Asn Lys Val Gly Thr Val			
	530	535	540
Gly Arg Asn Ile Ser Phe Tyr Ile Thr Asp Val Pro Asn Gly Phe His			
545	550	555	560
Val Asn Leu Glu Lys Met Pro Thr Glu Gly Glu Asp Leu Lys Leu Ser			
	565	570	575
Cys Thr Val Asn Lys Phe Leu Tyr Arg Asp Val Thr Trp Ile Leu Leu			
	580	585	590
Arg Thr Val Asn Asn Arg Thr Met His Tyr Ser Ile Ser Lys Gln Lys			
	595	600	605

20250309 10:00:00

Met Ala Ile Thr Lys Glu His Ser Ile Thr Leu Asn Leu Thr Ile Met

610

615

620

Asn Val Ser Leu Gln Asp Ser Gly Thr Tyr Ala Cys Arg Ala Arg Asn

625

630

635

640

Val Tyr Thr Gly Glu Glu Ile Leu Gln Lys Lys Glu Ile Thr Ile Arg

645

650

655

Asp Gln Glu Ala Pro Tyr Leu Leu Arg Asn Leu Ser Asp His Thr Val

660

665

670

Ala Ile Ser Ser Ser Thr Thr Leu Asp Cys His Ala Asn Gly Val Pro

675

680

685

Glu Pro Gln Ile Thr Trp Phe Lys Asn Asn His Lys Ile Gln Gln Glu

690

695

700

Pro Gly Ile Ile Leu Gly Pro Gly Ser Ser Thr Leu Phe Ile Glu Arg

705

710

715

720

Val Thr Glu Glu Asp Glu Gly Val Tyr His Cys Lys Ala Thr Asn Gln

725

730

735

Lys Gly Ser Val Glu Ser Ser Ala Tyr Leu Thr Val Gln Gly Thr Ser

740

745

750

10060065.042900

Asp Lys Ser Asn Leu Glu Leu Ile Thr Leu Thr Cys Thr Cys Val Ala

755

760

765

Ala Thr Leu Phe Trp Leu Leu Leu Thr Leu Leu Ile Arg Lys Met Lys

770

775

780

Arg Ser Ser Ser Glu Ile Lys Thr Asp Tyr Leu Ser Ile Ile Met Asp

785

790

795

800

Pro Asp Glu Val Pro Leu Asp Glu Gln Cys Glu Arg Leu Pro Tyr Asp

805

810

815

Ala Ser Lys Trp Glu Phe Ala Arg Glu Arg Leu Lys Leu Gly Lys Ser

820

825

830

Leu Gly Arg Gly Ala Phe Gly Lys Val Val Gln Ala Ser Ala Phe Gly

835

840

845

Ile Lys Lys Ser Pro Thr Cys Arg Thr Val Ala Val Lys Met Leu Lys

850

855

860

Glu Gly Ala Thr Ala Ser Glu Tyr Lys Ala Leu Met Thr Glu Leu Lys

865

870

875

880

Ile Leu Thr His Ile Gly His His Leu Asn Val Val Asn Leu Leu Gly

206270"59009001

885

890

895

Ala Cys Thr Lys Gln Gly Gly Pro Leu Met Val Ile Val Glu Tyr Cys

900

905

910

Lys Tyr Gly Asn Leu Ser Asn Tyr Leu Lys Ser Lys Arg Asp Leu Phe

915

920

925

Phe Leu Asn Lys Asp Ala Ala Leu His Met Glu Pro Lys Lys Glu Lys

930

935

940

Met Glu Pro Gly Leu Glu Gln Gly Lys Lys Pro Arg Leu Asp Ser Val

945

950

955

960

Thr Ser Ser Glu Ser Phe Ala Ser Ser Gly Phe Gln Glu Asp Lys Ser

965

970

975

Leu Ser Asp Val Glu Glu Glu Glu Asp Ser Asp Gly Phe Tyr Lys Glu

980

985

990

Pro Ile Thr Met Glu Asp Leu Ile Ser Tyr Ser Phe Gln Val Ala Arg

995

1000

1005

Gly Met Glu Phe Leu Ser Ser Arg Lys Cys Ile His Arg Asp Leu Ala

1010

1015

1020

206270 59009007

Ala Arg Asn Ile Leu Leu Ser Glu Asn Asn Val Val Lys Ile Cys Asp  
 1025 1030 1035 1040

Phe Gly Leu Ala Arg Asp Ile Tyr Lys Asn Pro Asp Tyr Val Arg Lys  
 1045 1050 1055

Gly Asp Thr Arg Leu Pro Leu Lys Trp Met Ala Pro Glu Ser Ile Phe  
 1060 1065 1070

Asp Lys Ile Tyr Ser Thr Lys Ser Asp Val Trp Ser Tyr Gly Val Leu  
 1075 1080 1085

Leu Trp Glu Ile Phe Ser Leu Gly Gly Ser Pro Tyr Pro Gly Val Gln  
 1090 1095 1100

Met Asp Glu Asp Phe Cys Ser Arg Leu Arg Glu Gly Met Arg Met Arg  
 1105 1110 1115 1120

Ala Pro Glu Tyr Ser Thr Pro Glu Ile Tyr Gln Ile Met Leu Asp Cys  
 1125 1130 1135

Trp His Arg Asp Pro Lys Glu Arg Pro Arg Phe Ala Glu Leu Val Glu  
 1140 1145 1150

Lys Leu Gly Asp Leu Leu Gln Ala Asn Val Gln Gln Asp Gly Lys Asp  
 1155 1160 1165

206270" 500900T



Tyr Ile Pro Ile Asn Ala Ile Leu Thr Gly Asn Ser Gly Phe Thr Tyr  
 1170 1175 1180

Ser Thr Pro Ala Phe Ser Glu Asp Phe Phe Lys Glu Ser Ile Ser Ala  
 1185 1190 1195 1200

Pro Lys Phe Asn Ser Gly Ser Ser Asp Asp Val Arg Tyr Val Asn Ala  
 1205 1210 1215

Phe Lys Phe Met Ser Leu Glu Arg Ile Lys Thr Phe Glu Glu Leu Leu  
 1220 1225 1230

Pro Asn Ala Thr Ser Met Phe Asp Asp Tyr Gln Gly Asp Ser Ser Thr  
 1235 1240 1245

Leu Leu Ala Ser Pro Met Leu Lys Arg Phe Thr Trp Thr Asp Ser Lys  
 1250 1255 1260

Pro Lys Ala Ser Leu Lys Ile Asp Leu Arg Val Thr Ser Lys Ser Lys  
 1265 1270 1275 1280

Glu Ser Gly Leu Ser Asp Val Ser Arg Pro Ser Phe Cys His Ser Ser  
 1285 1290 1295

Cys Gly His Val Ser Glu Gly Lys Arg Arg Phe Thr Tyr Asp His Ala

20250909 10:00:00

114/172

1300

1305

1310

Glu Leu Glu Arg Lys Ile Ala Cys Cys Ser Pro Pro Pro Asp Tyr Asn

1315

1320

1325

Ser Val Val Leu Tyr Ser Thr Pro Pro Ile

1330

1335

<210> 24

<211> 309

<212> PRT

<213> Homo sapiens

<400> 24

Met Asp Glu Lys Val Phe Thr Lys Glu Leu Asp Gln Trp Ile Glu Gln

1

5

10

15

Leu Asn Glu Cys Lys Gln Leu Ser Glu Ser Gln Val Lys Ser Leu Cys

20

25

30

Glu Lys Ala Lys Glu Ile Leu Thr Lys Glu Ser Asn Val Gln Glu Val

35

40

45

Arg Cys Pro Val Thr Val Cys Gly Asp Val His Gly Gln Phe His Asp

50

55

60

206210"59009007

Leu Met Glu Leu Phe Arg Ile Gly Gly Lys Ser Pro Asp Thr Asn Tyr

65 70 75 80

Leu Phe Met Gly Asp Tyr Val Asp Arg Gly Tyr Tyr Ser Val Glu Thr

85 90 95

Val Thr Leu Leu Val Ala Leu Lys Val Arg Tyr Arg Glu Arg Ile Thr

100 105 110

Ile Leu Arg Gly Asn His Glu Ser Arg Gln Ile Thr Gln Val Tyr Gly

115 120 125

Phe Tyr Asp Glu Cys Leu Arg Lys Tyr Gly Asn Ala Asn Val Trp Lys

130 135 140

Tyr Phe Thr Asp Leu Phe Asp Tyr Leu Pro Leu Thr Ala Leu Val Asp

145 150 155 160

Gly Gln Ile Phe Cys Leu His Gly Gly Leu Ser Pro Ser Ile Asp Thr

165 170 175

Leu Asp His Ile Arg Ala Leu Asp Arg Leu Gln Glu Val Pro His Glu

180 185 190

Gly Pro Met Cys Asp Leu Leu Trp Ser Asp Pro Asp Asp Arg Gly Gly

10060065 012502

205

220

240

255

270

285

300

305

&lt;211&gt; 394

<213> Homo sapiens

Met Val Thr Met Glu Glu Leu Arg Glu Met Asp Cys Ser Val Leu Lys

Arg Leu Met Asn Arg Asp Glu Asn Gly Gly Gly Ala Gly Gly Ser Gly

Ser His Gly Thr Leu Gly Leu Pro Ser Gly Gly Lys Cys Leu Leu Leu

Asp Cys Arg Pro Phe Leu Ala His Ser Ala Gly Tyr Ile Leu Gly Ser

Val Asn Val Arg Cys Asn Thr Ile Val Arg Arg Arg Ala Lys Gly Ser

Val Ser Leu Glu Gln Ile Leu Pro Ala Glu Glu Glu Val Arg Ala Arg

Leu Arg Ser Gly Leu Tyr Ser Ala Val Ile Val Tyr Asp Glu Gly Ser

Pro Arg Ala Glu Ser Leu Arg Glu Asp Ser Thr Val Ser Leu Val Val

125

140

160

175

190

205

220

240

255

Ser Trp Phe Met Glu Ala Ile Glu Tyr Ile Asp Ala Val Lys Asp Cys  
 260 265 270

Arg Gly Arg Val Leu Val His Cys Gln Ala Gly Ile Ser Arg Ser Ala  
 275 280 285

Thr Ile Cys Leu Ala Tyr Leu Met Met Lys Lys Arg Val Arg Leu Glu  
 290 295 300

Glu Ala Phe Glu Phe Val Lys Gln Arg Arg Ser Ile Ile Ser Pro Asn  
 305 310 315 320

Phe Ser Phe Met Gly Gln Leu Leu Gln Phe Glu Ser Gln Val Leu Ala  
 325 330 335

Thr Ser Cys Ala Ala Glu Ala Ala Ser Pro Ser Gly Pro Leu Arg Glu  
 340 345 350

Arg Gly Lys Thr Pro Ala Thr Pro Thr Ser Gln Phe Val Phe Ser Phe  
 355 360 365

Pro Val Ser Val Gly Val His Ser Ala Pro Ser Ser Leu Pro Tyr Leu  
 370 375 380

His Ser Pro Ile Thr Thr Ser Pro Ser Cys  
 385 390

20251015 01:29:02

&lt;210&gt; 26

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 26

Met Ser Gly Ser Phe Glu Leu Ser Val Gln Asp Leu Asn Asp Leu Leu

1 5 10 15

Ser Asp Gly Ser Gly Cys Tyr Ser Leu Pro Ser Gln Pro Cys Asn Glu

20 25 30

Val Thr Pro Arg Ile Tyr Val Gly Asn Ala Ser Val Ala Gln Asp Ile

35 40 45

Pro Lys Leu Gln Lys Leu Gly Ile Thr His Val Leu Asn Ala Ala Glu

50 55 60

Gly Arg Ser Phe Met His Val Asn Thr Asn Ala Asn Phe Tyr Lys Asp

65 70 75 80

Ser Gly Ile Thr Tyr Leu Gly Ile Lys Ala Asn Asp Thr Gln Glu Phe

85 90 95

20250310 14:00:00



Asn Leu Ser Ala Tyr Phe Glu Arg Ala Ala Asp Phe Ile Asp Gln Ala  
 100 105 110

Leu Ala Gln Lys Asn Gly Arg Val Leu Val His Cys Arg Glu Gly Tyr  
 115 120 125

Ser Arg Ser Pro Thr Leu Val Ile Ala Tyr Leu Met Met Arg Gln Lys  
 130 135 140

Met Asp Val Lys Ser Ala Leu Ser Ile Val Arg Gln Asn Arg Glu Ile  
 145 150 155 160

Gly Pro Asn Asp Gly Phe Leu Ala Gln Leu Cys Gln Leu Asn Asp Arg  
 165 170 175

Leu Ala Lys Glu Gly Lys Leu Lys Pro  
 180 185

<210> 27

<211> 657

<212> PRT

<213> Homo sapiens

<400> 27

Met Arg Arg Ala Val Cys Phe Pro Ala Leu Cys Leu Leu Leu Asn Leu

1                    5                    10                    15

His Ala Ala Gly Cys Phe Ser Gly Asn Asn Asp His Phe Leu Ala Ile

20                    25                    30

Asn Gln Lys Lys Ser Gly Lys Pro Val Phe Ile Tyr Lys His Ser Gln

35                    40                    45

Asp Ile Glu Lys Ser Leu Asp Ile Ala Pro Gln Lys Ile Tyr Arg His

50                    55                    60

Ser Tyr His Ser Ser Ser Glu Ala Gln Val Ser Lys Arg His Gln Ile

65                    70                    75                    80

Val Asn Ser Ala Phe Pro Arg Pro Ala Tyr Asp Pro Ser Leu Asn Leu

85                    90                    95

Leu Ala Met Asp Gly Gln Asp Leu Glu Val Glu Asn Leu Pro Ile Pro

100                    105                    110

Ala Ala Asn Val Ile Val Val Thr Leu Gln Met Asp Val Asn Lys Leu

115                    120                    125

Asn Ile Thr Leu Leu Arg Ile Phe Arg Gln Gly Val Ala Ala Ala Leu

130                    135                    140

206270"590900T

Gly Leu Leu Pro Gln Gln Val His Ile Asn Arg Leu Ile Gly Lys Lys  
 145 150 155 160

Asn Ser Ile Glu Leu Phe Val Ser Pro Ile Asn Arg Lys Thr Gly Ile  
 165 170 175

Ser Asp Ala Leu Pro Ser Glu Glu Val Leu Arg Ser Leu Asn Ile Asn  
 180 185 190

Val Leu His Gln Ser Leu Ser Gln Phe Gly Ile Thr Glu Val Ser Pro  
 195 200 205

Glu Lys Asn Val Leu Gln Gly Gln His Glu Ala Asp Lys Ile Trp Ser  
 210 215 220

Lys Glu Gly Phe Tyr Ala Val Val Ile Phe Leu Ser Ile Phe Val Ile  
 225 230 235 240

Ile Val Thr Cys Leu Met Ile Leu Tyr Arg Leu Lys Glu Arg Phe Gln  
 245 250 255

Leu Ser Leu Arg Gln Asp Lys Glu Lys Asn Gln Glu Ile His Leu Ser  
 260 265 270

Pro Ile Thr Leu Gln Pro Ala Leu Ser Glu Ala Lys Thr Val His Ser  
 275 280 285

20050005 "04302

Met Val Gln Pro Glu Gln Ala Pro Lys Val Leu Asn Val Val Val Asp  
 290 295 300

Pro Gln Gly Arg Gly Ala Pro Glu Ile Arg Ala Thr Thr Ala Thr Ser  
 305 310 315 320

Val Cys Pro Ser Pro Phe Lys Met Lys Pro Ile Gly Leu Gln Glu Arg  
 325 330 335

Arg Gly Ser Asn Val Ser Leu Thr Leu Asp Met Ser Ser Leu Gly Asn  
 340 345 350

Ile Glu Pro Phe Val Ser Ile Pro Thr Pro Arg Glu Lys Val Ala Met  
 355 360 365

Glu Tyr Leu Gln Ser Ala Ser Arg Ile Leu Thr Arg Ser Gln Leu Arg  
 370 375 380

Asp Val Val Ala Ser Ser His Leu Leu Gln Ser Glu Phe Met Glu Ile  
 385 390 395 400

Pro Met Asn Phe Val Asp Pro Lys Glu Ile Asp Ile Pro Arg His Gly  
 405 410 415

Thr Lys Asn Arg Tyr Lys Thr Ile Leu Pro Asn Pro Leu Ser Arg Val

205210"59009001

420

425

430

Cys Leu Arg Pro Lys Asn Val Thr Asp Ser Leu Ser Thr Tyr Ile Asn

435

440

445

Ala Asn Tyr Ile Arg Gly Tyr Ser Gly Lys Glu Lys Ala Phe Ile Ala

450

455

460

Thr Gln Gly Pro Met Ile Asn Thr Val Asp Asp Phe Trp Gln Met Val

465

470

475

480

Trp Gln Glu Asp Ser Pro Val Ile Val Met Ile Thr Lys Leu Lys Glu

485

490

495

Lys Asn Glu Lys Cys Val Leu Tyr Trp Pro Glu Lys Arg Gly Ile Tyr

500

505

510

Gly Lys Val Glu Val Leu Val Ile Ser Val Asn Glu Cys Asp Asn Tyr

515

520

525

Thr Ile Arg Asn Leu Val Leu Lys Gln Gly Ser His Thr Gln His Val

530

535

540

Lys His Tyr Trp Tyr Thr Ser Trp Pro Asp His Lys Thr Pro Asp Ser

545

550

555

560

2006065 0100

Ala Gln Pro Leu Leu Gln Leu Met Leu Asp Val Glu Glu Asp Arg Leu

565

570

575

Ala Ser Gln Gly Arg Gly Pro Val Val Val His Cys Ser Ala Gly Ile

580

585

590

Gly Arg Thr Gly Cys Phe Ile Ala Thr Ser Ile Gly Cys Gln Gln Leu

595

600

605

Lys Glu Glu Gly Val Val Asp Ala Leu Ser Ile Val Cys Gln Leu Arg

610

615

620

Met Asp Arg Gly Gly Met Val Gln Thr Ser Glu Gln Tyr Glu Phe Val

625

630

635

640

His His Ala Leu Cys Leu Tyr Glu Ser Arg Leu Ser Ala Glu Thr Val

645

650

655

Gln

<210> 28

<211> 537

<212> PRT

<213> Homo sapiens

206210 5900900T

&lt;400&gt; 28

Glu Arg Leu Leu Gly Arg Pro Gln Pro Ile Val Met Glu Ala Leu Asp  
 1 5 10 15

Glu Ala Glu Gly Leu Gln Asp Ser Gln Arg Glu Met Pro Pro Pro Pro  
 20 25 30

Pro Pro Ser Pro Pro Ser Asp Pro Ala Gln Lys Pro Pro Pro Arg Gly  
 35 40 45

Ala Gly Ser His Ser Leu Thr Val Arg Ser Ser Leu Cys Leu Phe Ala  
 50 55 60

Ala Ser Gln Phe Leu Leu Ala Cys Gly Val Leu Trp Phe Ser Gly Tyr  
 65 70 75 80

Gly His Met Trp Ser Gln Asn Ala Thr Asn Leu Val Ser Ser Leu Leu  
 85 90 95

Thr Leu Leu Lys Gln Leu Glu Pro Thr Ser Trp Leu Asp Ser Gly Thr  
 100 105 110

Trp Gly Val Pro Gly Leu Leu Leu Val Phe Leu Ser Val Gly Leu Val  
 115 120 125

20060055 0129002

Leu Val Thr Thr Leu Val Trp His Leu Leu Arg Thr Pro Pro Glu Pro  
 130 135 140

Pro Thr Pro Leu Pro Pro Glu Asp Arg Arg Gln Ser Val Ser Arg Gln  
 145 150 155 160

Pro Ser Phe Thr Tyr Ser Glu Trp Met Glu Glu Lys Ile Glu Asp Asp  
 165 170 175

Phe Leu Asp Leu Asp Pro Val Pro Glu Thr Pro Val Phe Asp Cys Val  
 180 185 190

Met Asp Ile Lys Pro Glu Ala Asp Pro Thr Ser Leu Thr Val Lys Ser  
 195 200 205

Met Gly Leu Gln Glu Arg Arg Gly Ser Asn Val Ser Leu Thr Leu Asp  
 210 215 220

Met Cys Thr Pro Gly Cys Asn Glu Glu Gly Phe Gly Tyr Leu Met Ser  
 225 230 235 240

Pro Arg Glu Glu Ser Ala Arg Glu Tyr Leu Leu Ser Ala Ser Arg Val  
 245 250 255

Leu Gln Ala Glu Glu Leu His Glu Lys Ala Leu Asp Pro Phe Leu Leu  
 260 265 270

205270" 9909007



Gln Ala Glu Phe Phe Glu Ile Pro Met Asn Phe Val Val Pro Lys Glu

275

280

285

Tyr Asp Ile Pro Gly Arg Cys Arg Lys Asn Arg Tyr Lys Thr Ile Leu

290

295

300

Pro Asn Pro His Ser Arg Val Cys Leu Thr Ser Pro Asp Pro Asp Asp

305

310

315

320

Pro Leu Ser Ser Tyr Ile Asn Ala Asn Tyr Ile Arg Gly Tyr Gly Gly

325

330

335

Glu Glu Lys Val Tyr Ile Ala Thr Gln Gly Pro Ile Val Ser Thr Val

340

345

350

Ala Asp Phe Trp Arg Met Val Trp Gln Glu His Thr Pro Ile Ile Val

355

360

365

Met Ile Thr Asn Ile Glu Glu Met Asn Glu Lys Cys Thr Glu Tyr Trp

370

375

380

Pro Glu Glu Gln Val Ala Tyr Asp Gly Val Glu Ile Thr Val Gln Lys

385

390

395

400

Val Ile His Thr Glu Asp Tyr Arg Leu Arg Leu Ile Ser Leu Lys Ser

206270" 59009007

405

410

415

Gly Thr Glu Glu Arg Gly Leu Lys His Tyr Trp Phe Thr Ser Trp Pro

420

425

430

Asp Gln Lys Thr Pro Asp Arg Ala Pro Pro Leu Leu His Leu Val Arg

435

440

445

Glu Val Glu Glu Ala Ala Gln Gln Glu Gly Pro His Cys Ala Pro Ile

450

455

460

Ile Val His Cys Ser Ala Gly Ile Gly Arg Thr Gly Cys Phe Ile Ala

465

470

475

480

Thr Ser Ile Cys Cys Gln Gln Leu Arg Gln Glu Gly Val Val Asp Ile

485

490

495

Leu Lys Thr Thr Cys Gln Leu Arg Gln Asp Arg Gly Gly Met Ile Gln

500

505

510

His Cys Glu Gln Tyr Gln Phe Val His His Val Met Ser Leu Tyr Glu

515

520

525

Lys Gln Leu Ser His Gln Ser Pro Glu

530

535

2005-01-05 10:00:00

<211> 403

&lt;212&gt; PRT

<213> Homo sapiens

&lt;400&gt; 29

Met Thr Ala Ile Ile Lys Glu Ile Val Ser Arg Asn Lys Arg Arg Tyr

1                      5                      10                      15

Gln Glu Asp Gly Phe Asp Leu Asp Leu Thr Tyr Ile Tyr Pro Asn Ile

20                      25                      30

Ile Ala Met Gly Phe Pro Ala Glu Arg Leu Glu Gly Val Tyr Arg Asn

35                      40                      45

Asn Ile Asp Asp Val Val Arg Phe Leu Asp Ser Lys His Lys Asn His

50                      55                      60

Tyr Lys Ile Tyr Asn Leu Cys Ala Glu Arg His Tyr Asp Thr Ala Lys

65                      70                      75                      80

Phe Asn Cys Arg Val Ala Gln Tyr Pro Phe Glu Asp His Asn Pro Pro

85                      90                      95

Gln Leu Glu Leu Ile Lys Pro Phe Cys Glu Asp Leu Asp Gln Trp Leu

✓ Lys

Leu Glu Leu Ile Lys Pro Phe Cys Glu Asp Leu Asp Gln Trp Leu

Phe Glu Phe Pro Gln Pro Leu Pro Val Cys Gly Asp Ile Lys Val Glu  
 245 250 255

Phe Phe His Lys Gln Asn Lys Met Leu Lys Lys Asp Lys Met Phe His  
 260 265 270

Phe Trp Val Asn Thr Phe Phe Ile Pro Gly Pro Glu Glu Thr Ser Glu  
 275 280 285

Lys Val Glu Asn Gly Ser Leu Cys Asp Gln Glu Ile Asp Ser Ile Cys  
 290 295 300

Ser Ile Glu Arg Ala Asp Asn Asp Lys Glu Tyr Leu Val Leu Thr Leu  
 305 310 315 320

Thr Lys Asn Asp Leu Asp Lys Ala Asn Lys Asp Lys Ala Asn Arg Tyr  
 325 330 335

Phe Ser Pro Asn Phe Lys Val Lys Leu Tyr Phe Thr Lys Thr Val Glu  
 340 345 350

Glu Pro Ser Asn Pro Glu Ala Ser Ser Ser Thr Ser Val Thr Pro Asp  
 355 360 365

Val Ser Asp Asn Glu Pro Asp His Tyr Arg Tyr Ser Asp Thr Thr Asp  
 370 375 380

20250909 1006065 01902

Ser Asp Pro Glu Asn Glu Pro Phe Asp Glu Asp Gln His Thr Gln Ile  
 385 390 395 400

Thr Lys Val

<210> 30

<211> 447

<212> PRT

<213> Homo sapiens

<400> 30

Met Arg Ser Ser Thr Leu Gln Asp Pro Arg Arg Arg Asp Pro Gln Asp  
 1 5 10 15

Asp Val Tyr Val Asp Ile Thr Asp Arg Leu Arg Phe Ala Ile Leu Tyr  
 20 25 30

Ser Arg Pro Lys Ser Ala Ser Asn Val His Tyr Phe Ser Ile Asp Asn  
 35 40 45

Glu Leu Glu Tyr Glu Asn Phe Ser Glu Asp Phe Gly Pro Leu Asn Leu  
 50 55 60

206270 59005007

Ala Met Val Tyr Arg Tyr Cys Cys Lys Ile Asn Lys Lys Leu Lys Ser  
 65 70 75 80

Ile Thr Met Leu Arg Lys Lys Ile Val His Phe Thr Gly Ser Asp Gln  
 85 90 95

Arg Lys Gln Ala Asn Ala Ala Phe Leu Val Gly Cys Tyr Met Val Ile  
 100 105 110

Tyr Leu Gly Arg Thr Pro Glu Ala Ala Tyr Arg Ile Leu Ile Phe Gly  
 115 120 125

Asp Thr Pro Tyr Ile Pro Phe Arg Asp Ala Ala Tyr Gly Ser Cys Asn  
 130 135 140

Phe Tyr Ile Thr Leu Leu Asp Cys Phe His Ala Val Lys Lys Ala Met  
 145 150 155 160

Gln Tyr Gly Phe Leu Asn Phe Asn Ser Phe Asn Leu Asp Glu Tyr Glu  
 165 170 175

His Tyr Glu Lys Ala Glu Asn Gly Asp Leu Asn Trp Ile Ile Pro Asp  
 180 185 190

Arg Phe Ile Ala Phe Cys Gly Pro His Ser Arg Ala Arg Leu Glu Ser  
 195 200 205

206210" 59009001

Gly Tyr His Gln His Ser Pro Glu Thr Tyr Ile Gln Tyr Phe Lys Asn

210

215

220

His Asn Val Thr Thr Ile Ile Arg Leu Asn Lys Arg Met Tyr Asp Ala

225

230

235

240

Lys Arg Phe Thr Asp Ala Gly Phe Asp His His Asp Leu Phe Phe Ala

245

250

255

Asp Gly Ser Thr Pro Thr Asp Ala Ile Val Lys Arg Phe Leu Asp Ile

260

265

270

Cys Glu Asn Ala Glu Gly Ala Ile Ala Val His Cys Lys Ala Gly Leu

275

280

285

Gly Arg Thr Gly Thr Leu Ile Ala Cys Tyr Ile Met Lys His Tyr Arg

290

295

300

Met Thr Ala Ala Glu Thr Ile Ala Trp Val Arg Ile Cys Arg Pro Gly

305

310

315

320

Leu Val Ile Gly Pro Gln Gln Gln Phe Leu Val Met Lys Gln Thr Ser

325

330

335

Leu Trp Leu Glu Gly Asp Tyr Phe Arg Gln Arg Leu Lys Gly Gln Glu

20250906 10:29:03



137/172

340

345

350

Asn Gly Gln His Arg Ala Ala Phe Ser Lys Leu Leu Ser Gly Val Asp

355

360

365

Asp Ile Ser Ile Asn Gly Val Glu Asn Gln Asp Gln Gln Glu Pro Lys

370

375

380

Pro Tyr Ser Asp Asp Asp Glu Ile Asn Gly Val Thr Gln Gly Asp Arg

385

390

395

400

Ser Arg Ala Leu Lys Arg Arg Arg Gln Ser Lys Thr Asn Asp Ile Leu

405

410

415

Leu Pro Ser Pro Leu Ala Val Leu Thr Phe Thr Leu Cys Ser Val Val

420

425

430

Ile Trp Trp Ile Val Cys Asp Tyr Ile Leu Pro Ile Leu Leu Phe

435

440

445

<210> 31

<211> 340

<212> PRT

<213> Homo sapiens

20250705 10:50:00

Met Leu Glu Ala Pro Gly Pro Ser Asp Gly Cys Glu Leu Ser Asn Pro

Ser Ala Ser Arg Val Ser Cys Ala Gly Gln Met Leu Glu Val Gln Pro

Gly Leu Tyr Phe Gly Gly Ala Ala Ala Val Ala Glu Pro Asp His Leu

Arg Glu Ala Gly Ile Thr Ala Val Leu Thr Val Asp Ser Glu Glu Pro

Ser Phe Lys Ala Gly Pro Gly Val Glu Asp Leu Trp Arg Leu Phe Val

65                      70                      75                      80

Pro Ala Leu Asp Lys Pro Glu Thr Asp Leu Leu Ser His Leu Asp Arg

85                      90                      95

Cys Val Ala Phe Ile Gly Gln Ala Arg Ala Glu Gly Arg Ala Val Leu

100                      105                      110

Val His Cys His Ala Gly Val Ser Arg Ser Val Ala Ile Ile Thr Ala

115                      120                      125

Phe Leu Met Lys Thr Asp Gln Leu Pro Phe Glu Lys Ala Tyr Glu Lys

130

135

140

Leu Gln Ile Leu Lys Pro Glu Ala Lys Met Asn Glu Gly Phe Glu Trp

145

150

155

160

Gln Leu Lys Leu Tyr Gln Ala Met Gly Tyr Glu Val Asp Thr Ser Ser

165

170

175

Ala Ile Tyr Lys Gln Tyr Arg Leu Gln Lys Val Thr Glu Lys Tyr Pro

180

185

190

Glu Leu Gln Asn Leu Pro Gln Glu Leu Phe Ala Val Asp Pro Thr Thr

195

200

205

Val Ser Gln Gly Leu Lys Asp Glu Val Leu Tyr Lys Cys Arg Lys Cys

210

215

220

Arg Arg Ser Leu Phe Arg Ser Ser Ser Ile Leu Asp His Arg Glu Gly

225

230

235

240

Ser Gly Pro Ile Ala Phe Ala His Lys Arg Met Thr Pro Ser Ser Met

245

250

255

Leu Thr Thr Gly Arg Gln Ala Gln Cys Thr Ser Tyr Phe Ile Glu Pro

260

265

270

202505-0130

Val Gln Trp Met Glu Ser Ala Leu Leu Gly Val Met Asp Gly Gln Leu  
 275 280 285

Leu Cys Pro Lys Cys Ser Ala Lys Leu Gly Ser Phe Asn Trp Tyr Gly  
 290 295 300

Glu Gln Cys Ser Cys Gly Arg Trp Ile Thr Pro Ala Phe Gln Ile His  
 305 310 315 320

Lys Asn Arg Val Asp Glu Met Lys Ile Leu Pro Val Leu Gly Ser Gln  
 325 330 335

Thr Gly Lys Ile  
 340

<210> 32

<211> 150

<212> PRT

<213> Homo sapiens

<400> 32

Met Gly Val Gln Pro Pro Asn Phe Ser Trp Val Leu Pro Gly Arg Leu  
 1 5 10 15

Ala Gly Leu Ala Leu Pro Arg Leu Pro Ala His Tyr Gln Phe Leu Leu

206270"5900900T

150

<213> Homo sapiens

1                      5                      10                      15

20                      25                      30

35                      40                      45

50                      55                      60

65                      70                      75                      80

85                      90                      95

Ser Ser Pro Ser Ser Ser Pro Pro Thr Ser Val Leu Gly Leu Gly Gly

100

105

110

Leu Arg Ile Ser Ser Asp Cys Ser Asp Gly Glu Ser Asp Arg Glu Leu

115

120

125

Pro Ser Ser Ala Thr Glu Ser Asp Gly Ser Pro Val Pro Ser Ser Gln

130

135

140

Pro Ala Phe Pro Val Gln Ile Leu Pro Tyr Leu Tyr Leu Gly Cys Ala

145

150

155

160

Lys Asp Ser Thr Asn Leu Asp Val Leu Gly Lys Tyr Gly Ile Lys Tyr

165

170

175

Ile Leu Asn Val Thr Pro Asn Leu Pro Asn Ala Phe Glu His Gly Gly

180

185

190

Glu Phe Thr Tyr Lys Gln Ile Pro Ile Ser Asp His Trp Ser Gln Asn

195

200

205

Leu Ser Gln Phe Phe Pro Glu Ala Ile Ser Phe Ile Asp Glu Ala Arg

210

215

220

Ser Lys Lys Cys Gly Val Leu Val His Cys Leu Ala Gly Ile Ser Arg

225

230

235

240

2025-10-29 14:30:00

Ser Val Thr Val Thr Val Ala Tyr Leu Met Gln Lys Met Asn Leu Ser  
 245 250 255

Leu Asn Asp Ala Tyr Asp Phe Val Lys Arg Lys Lys Ser Asn Ile Ser  
 260 265 270

Pro Asn Phe Asn Phe Met Gly Gln Leu Leu Asp Phe Glu Arg Thr Leu  
 275 280 285

Gly Leu Ser Ser Pro Cys Asp Asn His Ala Ser Ser Glu Gln Leu Tyr  
 290 295 300

Phe Ser Thr Pro Thr Asn His Asn Leu Phe Pro Leu Asn Thr Leu Glu  
 305 310 315 320

Ser Thr

<210> 34

<211> 521

<212> PRT

<213> Homo sapiens

<400> 34

Met Ser Glu Pro Lys Ala Ile Asp Pro Lys Leu Ser Thr Thr Asp Arg



1	5	10	15
Val Val Lys Ala Val Pro Phe Pro Pro Ser His Arg Leu Thr Ala Lys			
20	25	30	
Glu Val Phe Asp Asn Asp Gly Lys Pro Arg Val Asp Ile Leu Lys Ala			
35	40	45	
His Leu Met Lys Glu Gly Arg Leu Glu Glu Ser Val Ala Leu Arg Ile			
50	55	60	
Ile Thr Glu Gly Ala Ser Ile Leu Arg Gln Glu Lys Asn Leu Leu Asp			
65	70	75	80
Ile Asp Ala Pro Val Thr Val Cys Gly Asp Ile His Gly Gln Phe Phe			
85	90	95	
Asp Leu Met Lys Leu Phe Glu Val Gly Gly Ser Pro Ala Asn Thr Arg			
100	105	110	
Tyr Leu Phe Leu Gly Asp Tyr Val Asp Arg Gly Tyr Phe Ser Ile Glu			
115	120	125	
Cys Val Leu Tyr Leu Trp Ala Leu Lys Ile Leu Tyr Pro Lys Thr Leu			
130	135	140	

Phe Leu Leu Arg Gly Asn His Glu Cys Arg His Leu Thr Glu Tyr Phe  
 145 150 155 160

Thr Phe Lys Gln Glu Cys Lys Ile Lys Tyr Ser Glu Arg Val Tyr Asp  
 165 170 175

Ala Cys Met Asp Ala Phe Asp Cys Leu Pro Leu Ala Ala Leu Met Asn  
 180 185 190

Gln Gln Phe Leu Cys Val His Gly Gly Leu Ser Pro Glu Ile Asn Thr  
 195 200 205

Leu Asp Asp Ile Arg Lys Leu Asp Arg Phe Lys Glu Pro Pro Ala Tyr  
 210 215 220

Gly Pro Met Cys Asp Ile Leu Trp Ser Asp Pro Leu Glu Asp Phe Gly  
 225 230 235 240

Asn Glu Lys Thr Gln Glu His Phe Thr His Asn Thr Val Arg Gly Cys  
 245 250 255

Ser Tyr Phe Tyr Ser Tyr Pro Ala Val Cys Glu Phe Leu Gln His Asn  
 260 265 270

Asn Leu Leu Ser Ile Leu Arg Ala His Glu Ala Gln Asp Ala Gly Tyr  
 275 280 285

20250606 012902

290

295

300

305

310

315

320

325

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340

345

350

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360

365

370

375

380

385

390

395

400

405

410

415

Ser Glu Ser Val Leu Thr Leu Lys Gly Leu Thr Pro Thr Gly Met Leu

420

425

430

Pro Ser Gly Val Leu Ser Gly Gly Lys Gln Thr Leu Gln Ser Ala Thr

435

440

445

Val Glu Ala Ile Glu Ala Asp Glu Ala Ile Lys Gly Phe Ser Pro Gln

450

455

460

His Lys Ile Thr Ser Phe Glu Glu Ala Lys Gly Leu Asp Arg Ile Asn

465

470

475

480

Glu Arg Met Pro Pro Arg Arg Asp Ala Met Pro Ser Asp Ala Asn Leu

485

490

495

Asn Ser Ile Asn Lys Ala Leu Thr Ser Glu Thr Asn Gly Thr Asp Ser

500

505

510

Asn Gly Ser Asn Ser Ser Asn Ile Gln

515

520

&lt;210&gt; 35

&lt;211&gt; 1267

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

2025-10-20 10:50:50

&lt;400&gt; 35

Asp Leu Ser Arg Ser His Cys His Val Tyr Leu Ala His Leu Glu Asn

1 5 10 15

Ser Phe Gly Pro Ser Gly Ala Arg Glu Gly Ser Leu Ser Ser Gln Asp

20 25 30

Ser Arg Thr Glu Ser Ala Ser Leu Ser Gln Ser Gln Val Asn Gly Phe

35 40 45

Phe Ala Ser His Leu Gly Asp Gln Thr Trp Gln Glu Ser Gln His Gly

50 55 60

Ser Pro Ser Pro Ser Val Ile Ser Lys Ala Thr Glu Lys Glu Thr Phe

65 70 75 80

Thr Asp Ser Asn Gln Ser Lys Thr Lys Lys Pro Gly Ile Ser Asp Val

85 90 95

Thr Asp Tyr Ser Asp Arg Gly Asp Ser Asp Met Asp Glu Ala Thr Tyr

100 105 110

Ser Ser Ser Gln Asp His Gln Thr Pro Lys Gln Glu Ser Ser Ser Ser

115 120 125

Val Asn Thr Ser Asn Lys Met Asn Phe Lys Thr Phe Pro Ser Ser Pro

206270 500900T

130

135

140

Pro Arg Ser Gly Asp Ile Phe Glu Val Glu Leu Ala Lys Asn Asp Asn

145

150

155

160

Ser Leu Gly Ile Ser Val Thr Gly Gly Val Asn Thr Ser Val Arg His

165

170

175

Gly Gly Ile Tyr Val Lys Ala Val Ile Pro Gln Gly Ala Ala Glu Ser

180

185

190

Asp Gly Arg Ile His Lys Gly Asp Arg Val Leu Ala Val Asn Gly Val

195

200

205

Ser Leu Glu Gly Ala Thr His Lys Gln Ala Val Glu Thr Leu Arg Asn

210

215

220

Thr Gly Gln Val Val His Leu Leu Leu Glu Lys Gly Gln Ser Pro Thr

225

230

235

240

Ser Lys Glu His Val Pro Val Thr Pro Gln Cys Thr Leu Ser Asp Gln

245

250

255

Asn Ala Gln Gly Gln Gly Pro Glu Lys Val Lys Lys Thr Thr Gln Val

260

265

270

202505190900T

Asp Ser Ser Gln Pro Ser Cys Val Glu Gln Ser Thr Ser Ser Asp Glu  
405 410 415

Asn Glu Met Ser Asp Lys Ser Lys Lys Gln Cys Lys Ser Pro Ser Arg  
 420 425 430

Lys Asp Ser Tyr Ser Asp Ser Ser Gly Ser Gly Glu Asp Asp Leu Val  
 435 440 445

Thr Ala Pro Ala Asn Ile Ser Asn Ser Thr Trp Ser Ser Ala Leu His  
 450 455 460

Gln Thr Leu Ser Asn Met Val Ser Gln Ala Gln Ser His His Glu Ala  
 465 470 475 480

Pro Arg Val Lys Lys Ile Pro Phe Val Pro Cys Phe Thr Ile Leu Arg  
 485 490 495

Lys Arg Pro Asn Lys Pro Glu Phe Glu Asp Ser Asn Pro Ser Pro Leu  
 500 505 510

Pro Pro Asp Met Ala Pro Gly Gln Ser Tyr Gln Pro Gln Ser Glu Ser  
 515 520 525

Ala Ser Ser Ser Ser Met Asp Lys Tyr His Ile His His Ile Ser Glu  
 530 535 540

Pro Thr Arg Gln Glu Asn Trp Thr Pro Leu Lys Asn Asp Leu Glu Asn

2025-10-29 09:00:00